

Environmental Assessment Worksheet

PILLSBURY A MILL COMPLEX

Minneapolis, Minnesota

Responsible Governmental Unit:

City of Minneapolis
330 South Fifth Street, Room 210
Minneapolis, MN 55415-1385
612-673-2347 (Tel)
612-673-2728 (Fax)
michael.orange@ci.minneapolis.mn.us

Project Proposer:

SchaferRichardson, Inc.
500 Banks Building
615 First Avenue NE
Minneapolis, Minnesota 55413
612-359-5844 (Tel)
612-359-5858 (Fax)
dfrank@sr-re.com

January 2004

Table of Contents

1.	PROJECT TITLE.....	1
2.	PROPOSER.....	1
3.	RGU.....	1
4.	REASON FOR EAW PREPARATION.....	2
5.	PROJECT LOCATION	2
6.	DESCRIPTION.....	7
7.	PROJECT MAGNITUDE DATA	13
8.	PERMITS AND APPROVALS REQUIRED.....	14
9.	LAND USE	15
10.	COVER TYPES	24
11.	FISH, WILDLIFE AND ECOLOGICALLY SENSITIVE RESOURCES.....	24
12.	PHYSICAL IMPACTS ON WATER RESOURCES	26
13.	WATER USE.....	26
14.	WATER-RELATED LAND USE MANAGEMENT DISTRICT.....	28
15.	WATER SURFACE USE.....	32
16.	EROSION AND SEDIMENTATION	32
17.	WATER QUALITY: SURFACE WATER RUNOFF	33
18.	WATER QUALITY: WASTEWATERS.....	34
19.	GEOLOGIC HAZARDS AND SOIL CONDITIONS	35
20.	SOLID WASTES, HAZARDOUS WASTES, STORAGE TANKS	36
21.	TRAFFIC.....	37
22.	VEHICLE-RELATED AIR EMISSIONS	51
23.	STATIONARY SOURCE AIR EMISSIONS	59
24.	ODORS, NOISE AND DUST.....	59
25.	NEARBY RESOURCES	65
26.	VISUAL IMPACTS	70
27.	COMPATIBILITY WITH PLANS AND LAND USE REGULATIONS.....	71
28.	IMPACT ON INFRASTRUCTURE AND PUBLIC SERVICES.....	75
29.	CUMULATIVE IMPACTS	75
30.	OTHER POTENTIAL ENVIRONMENTAL IMPACTS	75
31.	SUMMARY OF ISSUES.....	79

APPENDIX TO QUESTION 11

APPENDIX TO QUESTION 14

APPENDIX TO QUESTION 25

APPENDIX TO QUESTION 27

List of Figures

FIGURE 5.1	County Map Showing Site Location	3
FIGURE 5.2	U.S. Geological Survey Quad.....	4
FIGURE 5.3	Proposed Site Plan	5
FIGURE 5.4	Building Heights	6
FIGURE 6.1	Aerial View of Development Looking West	10
FIGURE 6.2	View of Proposed Development from the South	11
FIGURE 9.1	Site Location and Surrounding Land Uses	16
FIGURE 9.2	Primary Zoning Districts	18
FIGURE 9.3	Overlay Zoning Districts	19
FIGURE 9.4	St. Anthony Falls Historical District	20
FIGURE 9.5	Marcy-Holmes Neighborhood – Future Land Use Plan.....	21
FIGURE 13.1	Well Location Map	27
FIGURE 14.1	Mississippi National River and Recreation Area.....	29
FIGURE 21.1	Location of Intersections for Analysis	38
FIGURE 21.2	Site Plan.....	39
FIGURE 21.3	Existing Functional Classification and Signalized Intersections.....	42
FIGURE 21.4	Distribution of New Trips	45
FIGURE 21.5	PM Peak Hour Volumes – Westerly Intersections	46
FIGURE 21.6	PM Peak Hour Volumes – I-35W Intersections	47
FIGURE 22.1	Receptor Sites for Westerly Intersections	53
FIGURE 22.2	Receptor Sites at I-35W, 4th St. and University Avenue.....	54
FIGURE 24.1	Noise Contours from Steam Plant.....	62
FIGURE 27.1	300’ River Edge Setback	72
FIGURE 30.1	Shadows during the Summer and Winter Solstice	77
FIGURE 30.2	Shadows during the Vernal and Autumnal Equinox	78

List of Tables

Table 6.1	Project Summary by Parcel.....	9
Table 21.1	PM Peak Hour Trip Generation for Pillsbury A-Mill Redevelopment	43
Table 21.2	PM Peak Hour Trip Generation for Other Developments	43
Table 21.3	Intersection Levels of Service	48
Table 21.4	Approach Volumes at University Avenue and 6 th Avenue SE Intersection.....	51
Table 22.1	MPCA Ambient Air Quality Standards for Carbon Monoxide	52
Table 22.2	Intersections Analyzed For Carbon Monoxide	52
Table 22.3	CO Background Concentrations (PPM).....	55
Table 22.4	1-Hour CO Concentrations on 4 th Avenue SE for Westerly Intersections	56
Table 22.5	1-Hour CO Concentrations on University Ave. SE for Westerly Intersections ...	56
Table 22.6	1 Hour CO Concentrations at I-35W, 4 th St. and University Avenue	57
Table 22.7	8-Hour CO Concentrations on 4 th Street SE for Westerly Intersections	57
Table 22.8	8-Hour CO Concentrations on University Ave. SE at Westerly Intersections.....	58
Table 22.9	8-Hour CO Concentrations at I-35W, 4 th St. SE and University Avenue SE	58
Table 24.1	Minnesota Noise Standards	59
Table 24.2	Projected Noise Levels from the General Mills Research Facility	64
Table 24.3	Sound Level (dBA) in Father Hennepin Park.....	64

Information in this *Environmental Assessment Worksheet* has been provided by the following organizations:

Organization	EAW Responsibility/Information Provided
SchaferRichardson, Inc.	Project proposer/project information
City of Minneapolis	Responsible Governmental Unit/project review
Cunningham Group/DeStefano+Partners	Project architect/project design and requirements
David Braslau Associates, Inc.	EAW Preparation, special studies
Sunde Engineering, Inc	Civil engineering
Benshoof & Associates, Inc.	Traffic analysis
Braun Intertec	Geotechnical, natural resources, water impacts
106 Group, Inc.	Archaeological investigation
Close Landscape Architecture	Landscaping plan

ENVIRONMENTAL ASSESSMENT WORKSHEET

The Environmental Assessment Worksheet provides information about a project that may have the potential for significant environmental effects. The EAW is prepared by the Responsible Governmental Unit or its agents to determine whether an Environmental Impact Statement should be prepared. The project proposer must supply any reasonably accessible data for — but should not complete — the final worksheet. If a complete answer does not fit in the space allotted, attach additional sheets as necessary. The complete question as well as the answer must be included if the EAW is prepared electronically.

Note to reviewers: Comments must be submitted to the RGU (Question 3) during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for an EIS. Comments must be submitted to the RGU by 4:30 pm on Wednesday, March 3, 2004.

1. PROJECT TITLE

Pillsbury A Mill Complex

2. PROPOSER

Organization	SchaferRichardson, Inc.
Contact person	David Frank
Title	Project Manager
Address	615 First Ave NE, Suite 500
City, state, ZIP	Minneapolis, MN 55413
Phone	612-359-5844
Fax	612-359-5858
E-mail	dfrank@sr-re.com

3. RGU

Organization	City of Minneapolis
Contact Person	J. Michael Orange
Title	City Planner
Address	350 4th St. South Room 210
City, state, ZIP	Minneapolis, MN 55415-1385
Phone	612-673-2347
	TDD 612-673-2157
Fax	612-673-2728
E-mail	michael.orange@ci.minneapolis.mn.us

4. REASON FOR EAW PREPARATION

☐ EIS Scoping ☒ Mandatory EAW ☐ Citizen Petition

☐ RGU Discretion ☐ Proposer Volunteered

If EAW or EIS is mandatory give EQB rule category number:

4410.4300 subpart 19(D): 375 attached residential units in Metro city with comprehensive plan

4410.4300 subpart 31: Historical Places – demolition of grain elevators and annex

5. PROJECT LOCATION

The site is located within the corporate limits of Minneapolis, Minnesota in Hennepin County. The site is bordered on the north by 2nd Street SE, on the south by Main Street SE, on the east by 6th Avenue SE, and on the west by 3rd Avenue SE. Legal descriptions of all parcels making up the project are available for review at the office of Minneapolis City Planning.

County Hennepin

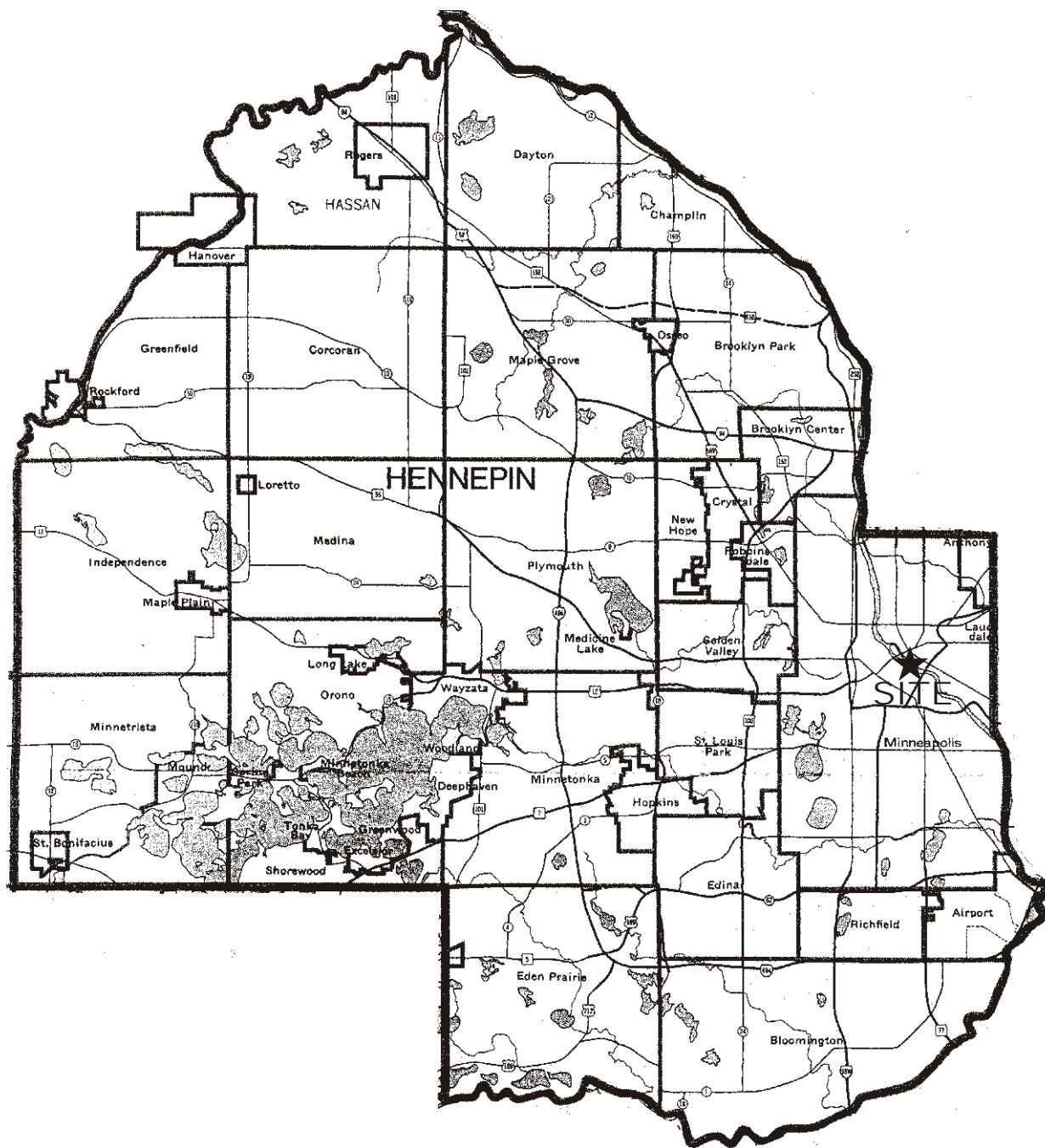
City/Township Minneapolis

NE 1/4 Section 23

Township 29 Range 24

Attach each of the following to the EAW:

- County map showing the general location of the project: **Refer to FIGURE 5.1.**
- U.S. Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries (photocopy acceptable): **Refer to FIGURE 5.2.**
- Site plan showing all significant project and natural features: **Refer to FIGURE 5.3.**
- Site plan showing building heights and elevations: **Refer to FIGURE 5.4.**



SchaferRichardson, Inc.

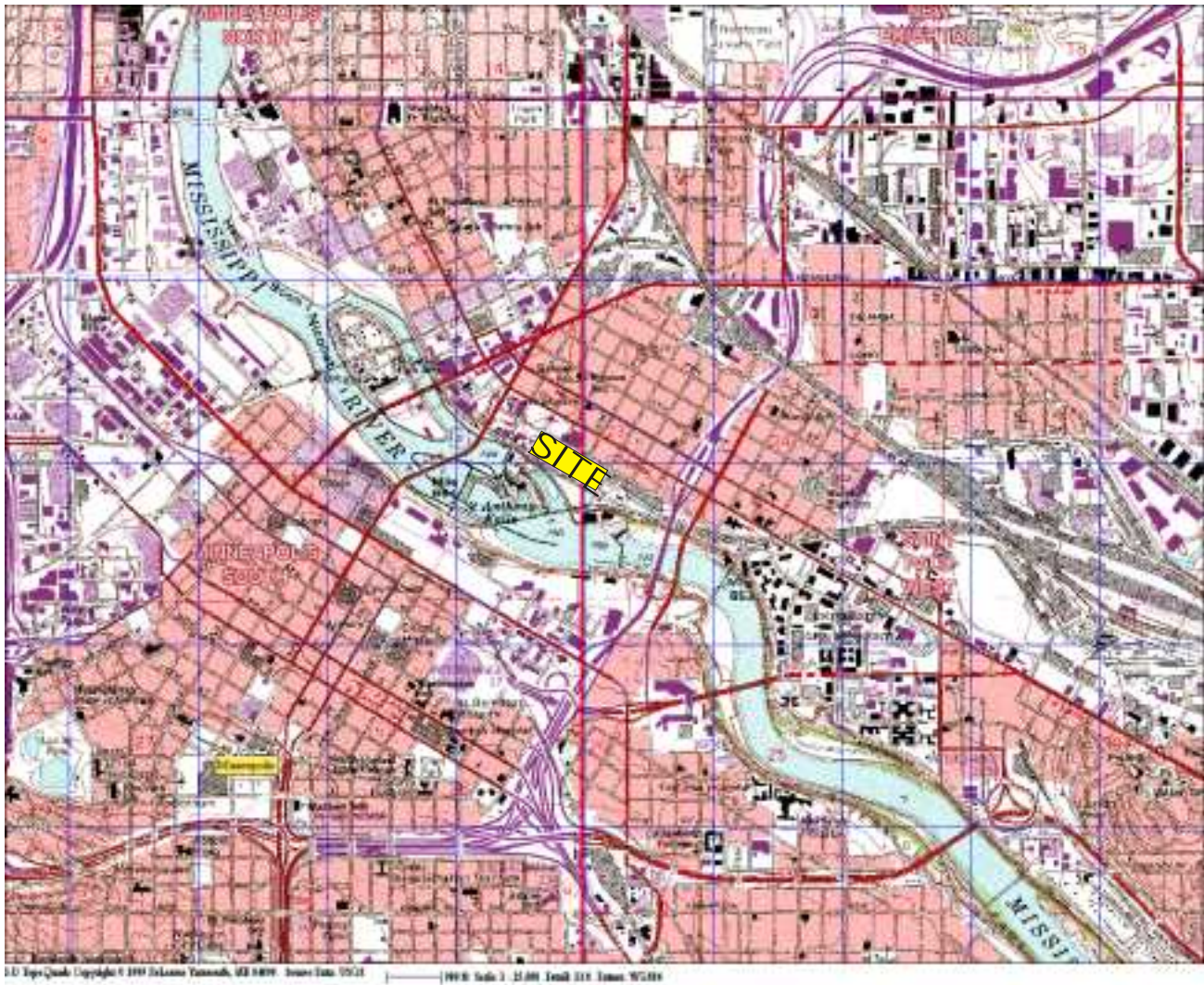
David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)

ENVIRONMENTAL ASSESSMENT
WORKSHEET

FIGURE 5.1

County Map Showing Site Location



SchaferRichardson, Inc.

David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)

ENVIRONMENTALASSESSMENT
WORKSHEET

FIGURE 5.2

U.S. Geological Survey Quad



Source: Cuningham Group and Close Landscape Architecture

SchaferRichardson, Inc.

David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)
ENVIRONMENTALASSESSMENT
WORKSHEET

FIGURE 5.3
Proposed Site Plan



SchaferRichardson, Inc.

David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)
ENVIRONMENTALASSESSMENT
WORKSHEET

FIGURE 5.4
Building Heights

6. DESCRIPTION

a. Provide a project summary of 50 words or less to be published in the *EQB Monitor*.

This EAW studies the site commonly known as the Pillsbury A Mill Complex on the east bank of the Mississippi River in Minneapolis Minnesota. The site is bounded north and south by 2nd Street SE and Main St. SE, east and west by 3rd Avenue SE and 6th Avenue SE. Upon full development, the site will contain 1,095 residential units, 105,000 square feet of commercial space and 1,832 parking stalls.

b. Give a complete description of the proposed project and related new construction. Attach additional sheets as necessary. Emphasize construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes. Include modifications to existing equipment or industrial processes and significant demolition, removal or remodeling of existing structures. Indicate the timing and duration of construction activities.

The project site, adjacent to the Mississippi River, is probably the premier large-scale development site in the Twin Cities. The site enjoys a wonderful southeasterly face, with powerful views of the Minneapolis skyline, down river to the southeast and upriver to the northwest. The view is protected from future development by Father Hennepin Bluff Park and reinforced by the steep topographic changes from the bluffs to the waters edge. The site has access to the center of Minneapolis across the historic Stone Arch Bridge and Central Avenue bridge, to the freeway system and to the adjacent University of Minnesota.

The proposed development will consist of nine new residential buildings with 1,798 internal and 34 surface parking stalls for residents and visitors. Some ground floor retail spaces will be provided for resident and neighborhood amenities. The site features several noteworthy historical buildings, which are scheduled to be renovated and reused to accommodate housing and commercial tenants. The new construction will vary in height from 8 to 27 stories.

The design concept for the site development places a high priority on creating a sense of neighborhood at the street levels. In order to accomplish this priority, townhouse unit types have been programmed into the street and plaza levels of each of the new buildings and portions of the existing historic buildings. The site drops approximately 26 feet from 2nd Street SE toward the Mississippi River, creating the opportunity to bench the parking into the site, surrounding it with housing, and maintaining the image of an auto free zone.

At Main Street, the retail uses and townhouses address the street to enliven the boulevard along the river, provide a housing type connected to the grade and continue the scale and interest initiated by the historic buildings; they provide life and energy to ensure the public safety and enjoyment of the public park. The residential towers above are set back from the townhouses and have little impact at the river park edge.

The block-deep site is penetrated along the east west axis parallel to the river at the halfway point with a partially covered service alley that allows access to the enclosed parking and provides all of the building services to occur out of sight and hearing of the residential units. Above this service corridor is a landscaped plaza, fronted by townhouses at each building face, again providing a familiar neighborhood building type and energizing the semi-public plaza overlooking the river gorge and park.

As part of the site development, a pedestrian path will be constructed to link the Marcy Holmes neighborhood to the river and adjacent park along the original axis of 4th Avenue SE. The road right of way was abandoned to make way for the construction of the historic Red Tile Elevator, which bears the signature sign for the complex. The pedestrian path will encourage public access through the historic core of the site, to the park, and to the river.

The A Mill is a famous and historic landmark for the City of Minneapolis; an icon on the river declaring the reason for the city's growth and development at the turn of the century. The A Mill, the Cleaning House, the South Mill, Warehouse #1, the Red Tile Elevator, Warehouse #2, and the two-story Machine Shop will be retained as mixed-use buildings to house both residential condominiums and commercial and retail tenants. In order to create parking for these historic structures, necessary to establish their economic viability in their adaptive reuse, it will be necessary to demolish the later poured concrete elevators that face 2nd Street SE. By removing this line of empty concrete silos, it will be possible to construct enclosed underground parking adjacent to the historic buildings and to add townhouses and mid-rise residential above them. The economic viability of the reuse of the mill buildings would be compromised without adjacent parking. The demolition will also allow a neighborhood-oriented streetscape fronting 2nd Street SE.

The site will provide 1,798 parking stalls in enclosed parking decks. The levels will be predominately underground; as the bedrock slopes up away from the river, some of the parking will be benched into the site and surrounded by townhouses. The primary parking access points will be from 3rd, 5th and 6th Avenues at mid-block. This internal, linked circulation pattern will reduce the impact of the cars on the pedestrian nature of the neighborhood streets. The site will also provide 34 surface parking stalls to serve the A Mill commercial areas bringing total parking on the site to 1,832 stalls.

ADM, from whom the site was purchased, had previously determined the facility to be functionally and economically obsolete. The site was sold on the condition that it not be reused as a milling facility.

The excavation, grading, and site demolition will create disruption from noise and truck hauling traffic to the adjacent areas and streets. Currently the site is industrial in use, and though the disruption will be real, if phased appropriately to clear the site early, the construction efforts will be least disruptive to the current adjacent industries. Opportunities for re-use of on-site concrete through a crushing operation for aggregate reuse is being explored to mitigate off-site disruption. Some site spoil could perhaps be removed from the site by rail to limit the impact of truck traffic on the roads.

New construction is expected to be post-tensioned concrete, which will demand significant truck delivery and tower cranes for construction. The residential towers will be built out over time as the market can accept the absorption rate. Current projections of demand suggest the project will be completed by 2012.

Table 6.1 shows the number of residential units, average residential unit area in square feet, commercial area by parcel (in gross square feet) as well as building heights and the number and location of parking stalls.

Table 6.1 Project Summary by Parcel

Location	Residential			Bldg Ht (ft)	Retail	Parking Location	
	Units	Avg Area	Stories	Elev (msl)	Area	Spaces	Type
A Mill Complex*	90	1400		see Fig. 5.4	70,000	10	Parcel A (329) + 10 surface
Machinery House				869	25,000	24	Surface
Warehouse #2	31	900	3			32	New structure
Parcel A						329	Underground (serves A Mill)
Parcel B	110	900	9	930		150	Under building
Parcel C	118	900	8	920		173	Under building
Parcel D	81	1400	15	962		161	Under building
Parcel E	257	1400	24/27	1109		361	Under building
Parcel D/E Phase 3	38	1400	10	912			Parcel E
Parcel F	176	1400	24	1052		298	Under building
Parcel G	151	1400	20	1012	10,000	294	Under building
Parcel F/G Phase 3	43	1400	10	912			Parcel G
TOTALS	1,095				105,000	1,832	

*A Mill Complex includes:

A Mill

South Mill

Cleaning House

Warehouse #1

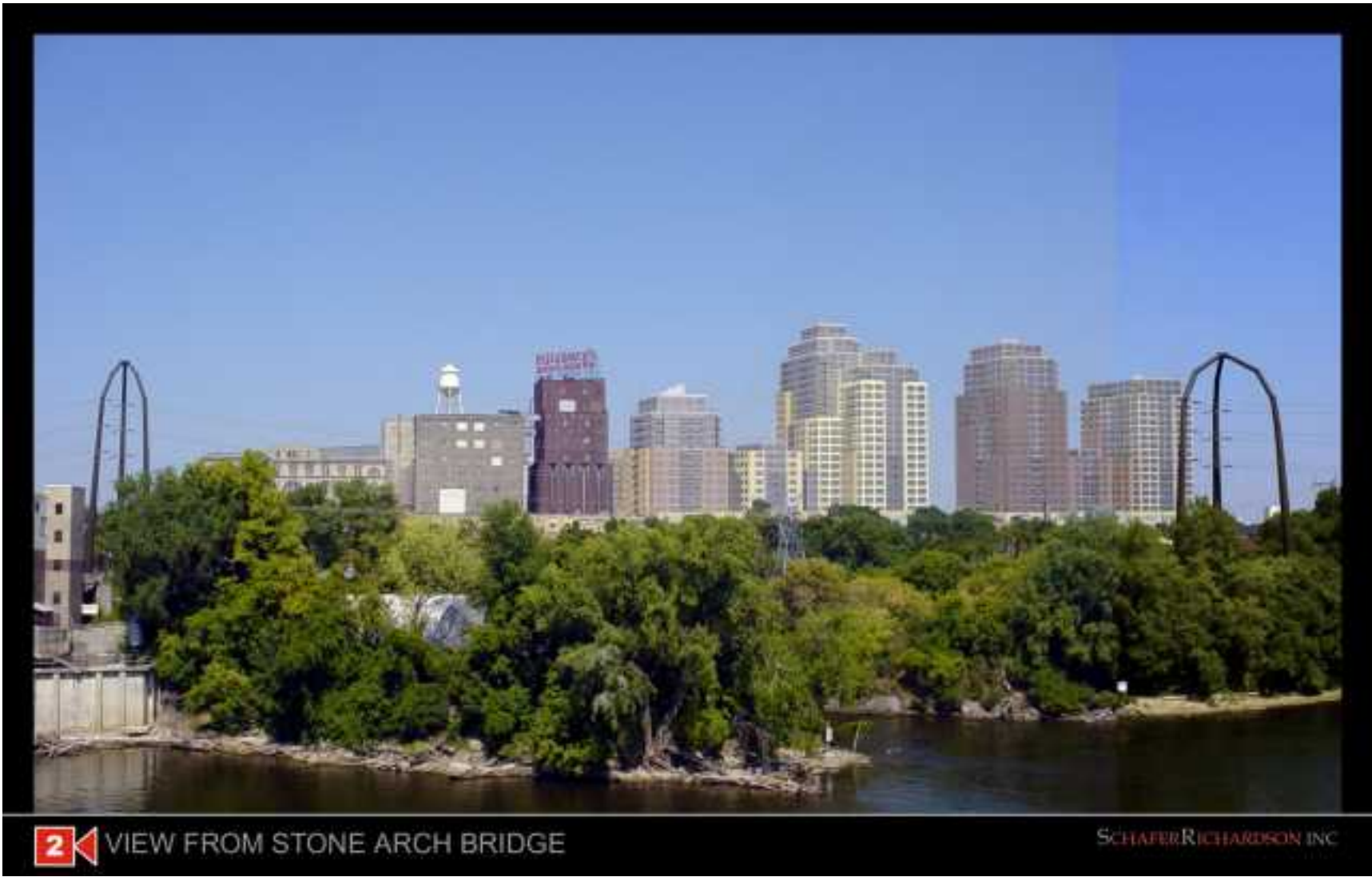
Red Tile Elevator

FIGURE 6.1 shows an aerial view of the proposed development looking towards the west. FIGURE 6.2 shows how the development would appear from the south across the Mississippi River.



Source: Cuningham Group

<div>SchaferRichardson, Inc.</div> <div>David Braslau Associates, Inc.</div>	<div>Pillsbury A Mill Complex (Minneapolis, Minnesota)</div> <div>ENVIRONMENTALASSESSMENT WORKSHEET</div>	<div>FIGURE 6.1</div> <div>Aerial View of Development Looking West</div>
--	---	--



Source: Cuningham Group

<div>SchaferRichardson, Inc.</div> <div>David Braslau Associates, Inc.</div>	<div>Pillsbury A Mill Complex (Minneapolis, Minnesota)</div> <div>ENVIRONMENTALASSESSMENT WORKSHEET</div>	<div>FIGURE 6.2</div> <div>View of Proposed Development from the South</div>
--	---	--

Community Involvement in Project Development

Community input and involvement in the A Mill project has been a guiding principle from the beginning, when the framework for the project was developed using the Marcy-Holmes Master Plan as a guide (see <http://www.marcy-holmes.org/masterplan>). Key project features derived from the Master Plan include the provision of access through the site to the park and the river, the focus on homeownership, the provision of density away from the heart of the neighborhood, and the preservation of the key historic buildings.

After several briefings for the Marcy-Holmes zoning and planning committee, the Marcy-Holmes Board, and the full Marcy-Holmes neighborhood, the neighborhood formed a task force to meet with the development team. The development team briefed the Nicollet Island / East Bank Neighborhood Association at their annual meeting in the summer of 2003. Members of this neighborhood attended the task force meetings as well. Task force meetings were held throughout the summer and fall of 2003, with an eye on both what is good about the project, and on what could be improved, from the neighborhood perspective. As an outgrowth of the task force meetings, the taller buildings in the project have been shortened in order to respect the neighborhood orientation of the site.

Key community groups and adjacent land owners who have received presentations about the project and had the opportunity to comment include the University of Minnesota (operator of the steam plant), the Old St. Anthony Association (East Hennepin district business association), the Soap Factory (nonprofit contemporary art gallery and adjacent property owner), Metal-Matic and W.D. Forbes (manufacturing facilities and adjacent property owners).

The development team has also briefed members of the Minneapolis City Council, the Minneapolis Planning Commission, the Mississippi River Technical Advisory Committee, the Minneapolis Heritage Preservation Commission, the St. Anthony Falls Heritage Board, the Minneapolis Park and Recreation Board, and Lupe Development (adjacent property owner).

A listing of permits and approvals that will be required for the development is contained in Question 8 of the EAW.

c. Explain the project purpose; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.

Since the mid 1970's the City has consistently used its investments, subsidies and approvals to de-industrialize the central riverfront. With the cessation of the milling operations at the A Mill, the future of this parcel can now be made consistent with the long term goals and objectives of the City and the pattern of public and private investment in the remainder of the central riverfront.

d. Are future stages of this development including development on any outlots planned or likely to happen? ☐ Yes ☒ No

If yes, briefly describe future stages, relationship to present project, timeline and plans for environmental review.

N/A

e. Is this project a subsequent stage of an earlier project? ☐ Yes ☒ No

If yes, briefly describe the past development, timeline and any past environmental review.

N/A

7. PROJECT MAGNITUDE DATA

Total project acreage 7.9

Number of residential units: unattached 0 attached 1,095 maximum units per building 294
Commercial, industrial or institutional building area (gross floor space): 105,000 SF

Indicate area of specific uses (in square feet):

Office	N/A	Manufacturing	N/A
Retail	105,000	Other Industrial	N/A
Warehouse	N/A	Institutional	N/A
Light Industrial	N/A	Agricultural	N/A
Other commercial (specify) N/A			
Building Height(s) If over 2 stories, compare to heights of nearby buildings			
8 to 27 stories. Existing buildings, elevators, silos, and signs vary in height from 29 feet to 225 feet. See Table 6.1 for heights of buildings above mean sea level.			

8. PERMITS AND APPROVALS REQUIRED

List all known local, state and federal permits, approvals and financial assistance for the project. Include modifications of any existing permits, governmental review of plans and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure.

Unit of Government	Type of Application	Status
State:		
Dept. of Natural Resources	Critical Area Review and Approval	To be applied for
	Water Appropriation Permit (construction dewatering)	To be applied for
State Historic Preservation Office	Project Review and Approval	To be applied for
Pollution Control Agency	Sanitary Sewer Extension Permit	To be applied for
	Natl. Pollution Discharge Elimination System Permit (NPDES)	To be applied for
	Water Quality (Sect. 401) Certification	To be applied for
	General Stormwater Permit for Construction	To be applied for
	Registration permits for generators	To be applied for
Dept. of Health	Watermain Ext. Permit/Plan Review	To be applied for
Local:		
City of Minneapolis	Preliminary Plat	To be applied for
	Final Plat	To be applied for
	Site Plan	To be applied for
	Grading/Erosion Control Plan	To be applied for
	Demolition Permit	To be applied for
	Building Permits	To be applied for
	Curb Cut Permits	To be applied for
	Comprehensive Plan Amendment*	To be applied for
	Rezoning, Conditional Use Permits and Variances*	To be applied for
	Heritage Preservation Commission Demolition Approval	Applied for and received
	Heritage Preservation Commission Plan Approval	To be applied for
	Transportation Demand Management Plan	To be applied for

* Subject to DNR approval.

It is not the objective of the EAW preparation to develop all the detailed information required for construction permits. The Proposer will assemble the required information and apply for these permits when appropriate.

9. LAND USE

Describe current and recent past land use and development on the site and on adjacent lands. Discuss project compatibility with adjacent and nearby land uses. Indicate whether any potential conflicts involve environmental matters. Identify any potential environmental hazards due to past site uses, such as soil contamination or abandoned storage tanks, or proximity to nearby hazardous liquid or gas pipelines.

Current Adjacent and Nearby Land Uses

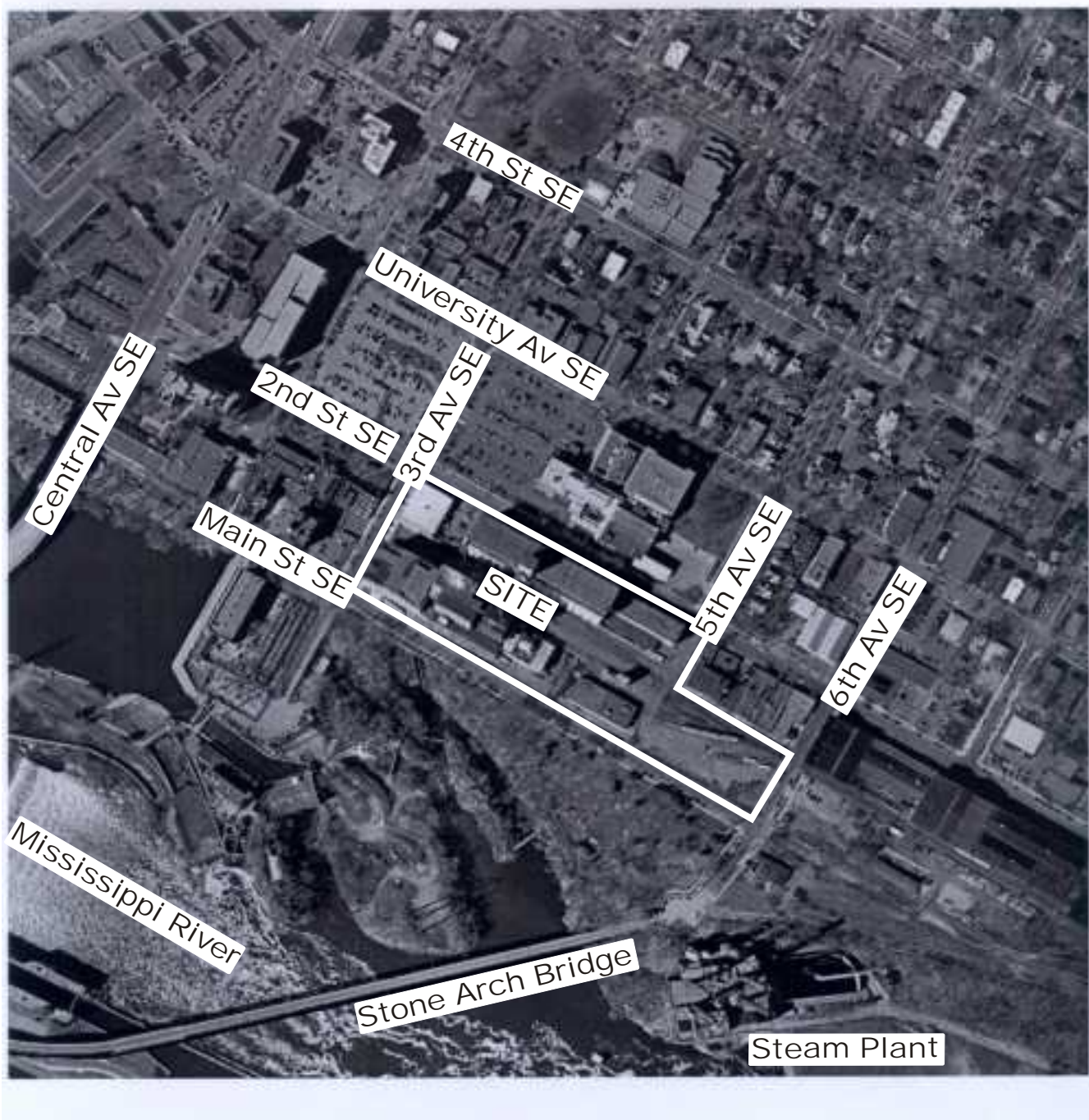
On the north:	General Mills Research Facility (north of 2nd Street) with associated parking.
On the south:	Father Hennepin Bluff Park (south of Main Street) and the Mississippi River.
On the east:	Existing building (Soap Factory) remaining on the north half of the block bounded by Main and 2nd St., 5th and 6th Avenue: Metal-Matic and Stone Arch Apartments east of 6th Street
On the southeast:	University of Minnesota Steam Plant
On the west:	St. Anthony Main Office and Commercial Complex and vacant (for sale) data center formally used by Pillsbury (the Diageo site) across 3rd Avenue SE.

The site location and surrounding land uses are shown in the aerial photograph in FIGURE 9.1.

Compatibility with Adjacent and Nearby Land Uses

Industrial land uses have occupied this site for over 130 years. The north half of the eastern most block (not a part of this project) will most likely remain as a light commercial and industrial use for the short term future. Across 6th Avenue SE to the east is the Metal-Matic plant but also the newly constructed Stone Arch Apartments. Southeast of the site is the University of Minnesota Steam Plant. The General Mills Research facility north of the proposed project does include some light industrial processing in support of research and development. Associated with this facility are some rooftop stacks and mechanical equipment that can generate noise but limited emissions. Noise and emissions are associated with the University Steam Plant to the southeast. Potential impacts from these facilities on the proposed project and mitigation to ensure compatibility with these adjacent land uses are addressed in this EAW.

The ADM processing and milling facility that was operating until recently on 2nd Street SE, generally halfway between 3rd Avenue SE and 5th Avenue SE, dominated the noise environment in the park south of Main Street. As part of the project, rail and truck activities and associated daytime and nighttime impacts will be eliminated west of 6th Avenue SE, thus also reducing rail activity east of 6th Avenue SE. The elimination of these sources and replacement with residential and limited commercial land uses along the park will greatly improve the sound environment in the park, although some noise from the University Steam Plant will still be present.



SchaferRichardson, Inc.

David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)

ENVIRONMENTALASSESSMENT
WORKSHEET

FIGURE 9.1

Site Location and
Surrounding Land Uses

The project must comply with the following plans and guidelines that include the project site:

City of Minneapolis Comprehensive Plan

The *Comprehensive Plan*'s Land Use Map is the primary plan by which the City decides whether a project is compatible with intended land use. The City uses the *Comprehensive Plan* in deciding how an area should be zoned. Zoning designations provide further detail regarding permitted activities for a tract of land. The project site is currently guided as "Light Industrial".

City of Minneapolis Zoning Code

Primary zoning districts are shown in FIGURE 9.2. The site is currently zoned I1. It is proposed that the C3A zoning district, which includes the east bank from 1st Avenue NE to the east edge of St. Anthony Main, be extended to include the project site. The C3A zoning would also be extended to include the "Diageo site" which may eventually be developed for residential and commercial uses.

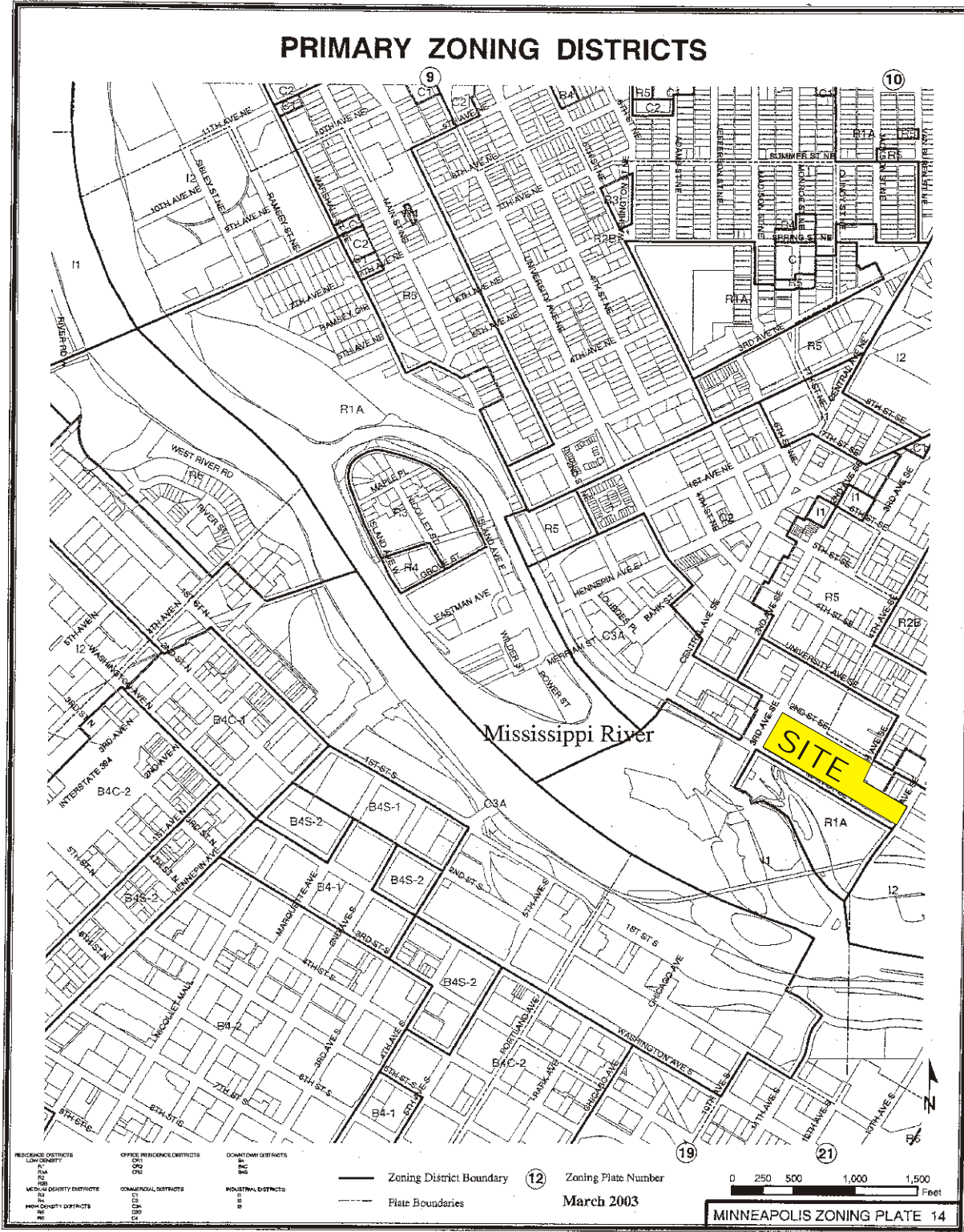
Overlay zoning districts are shown in FIGURE 9.3. The site falls within the Shoreland Overlay District (SH) and the Mississippi River Critical Area Overlay District (MR).

The site also falls within the St. Anthony Falls Historic District which is shown in FIGURE 9.4.

Master Plan for the Marcy-Holmes Neighborhood

The site is designated as IND (Light Industrial) in the Master Plan, and is adjacent to the C (General Commercial) land use to the west. As noted in Question 6 (Project Description), the project has been presented to and reviewed by the Marcy-Holmes Neighborhood Association, and reflects comments and changes proposed by the Association. Location of the site within the Future Land Use Plan is shown in FIGURE 9.5.

Compatibility of the project with these plans is discussed in Question 27 of this EAW.



Source: City of Minneapolis

SchaferRichardson, Inc.

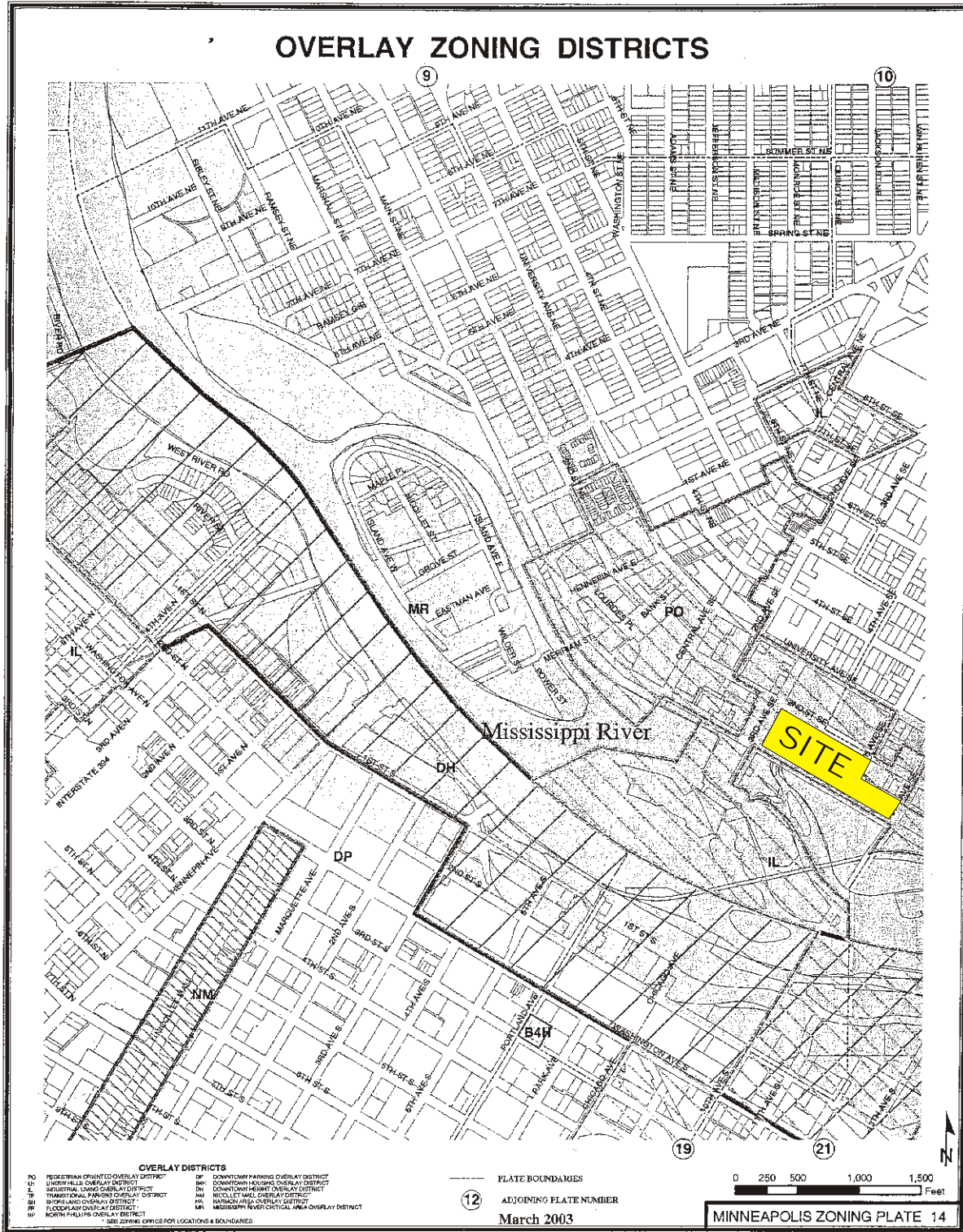
David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)

ENVIRONMENTAL ASSESSMENT
WORKSHEET

FIGURE 9.2

Primary Zoning Districts



Source: City of Minneapolis

SchaferRichardson, Inc.

David Braslau Associates, Inc.

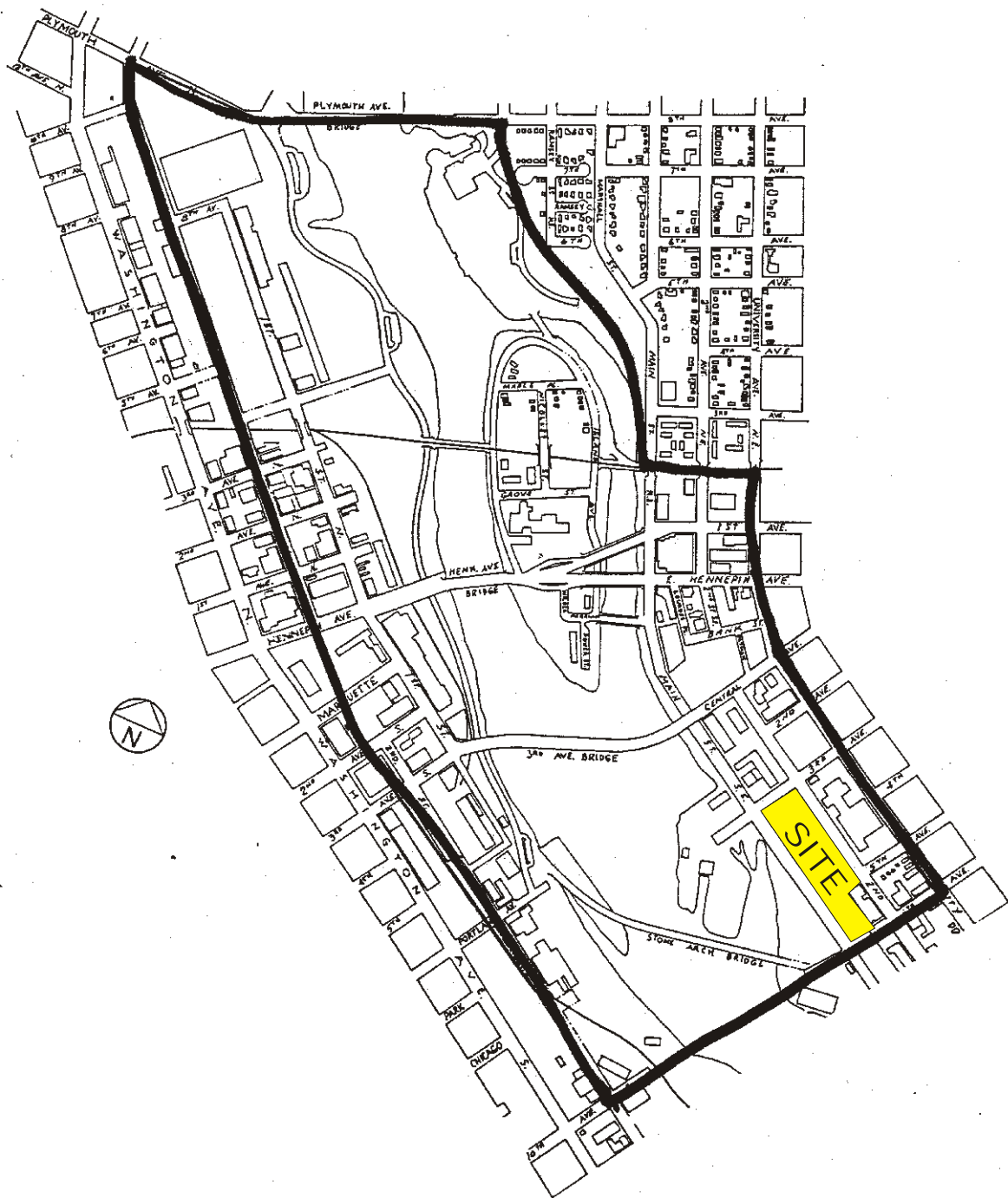
Pillsbury A Mill Complex
(Minneapolis, Minnesota)

ENVIRONMENTALASSESSMENT
WORKSHEET

FIGURE 9.3

Overlay Zoning Districts

ST. ANTHONY FALLS
HISTORIC DISTRICT



Source: City of Minneapolis

SchaferRichardson, Inc.

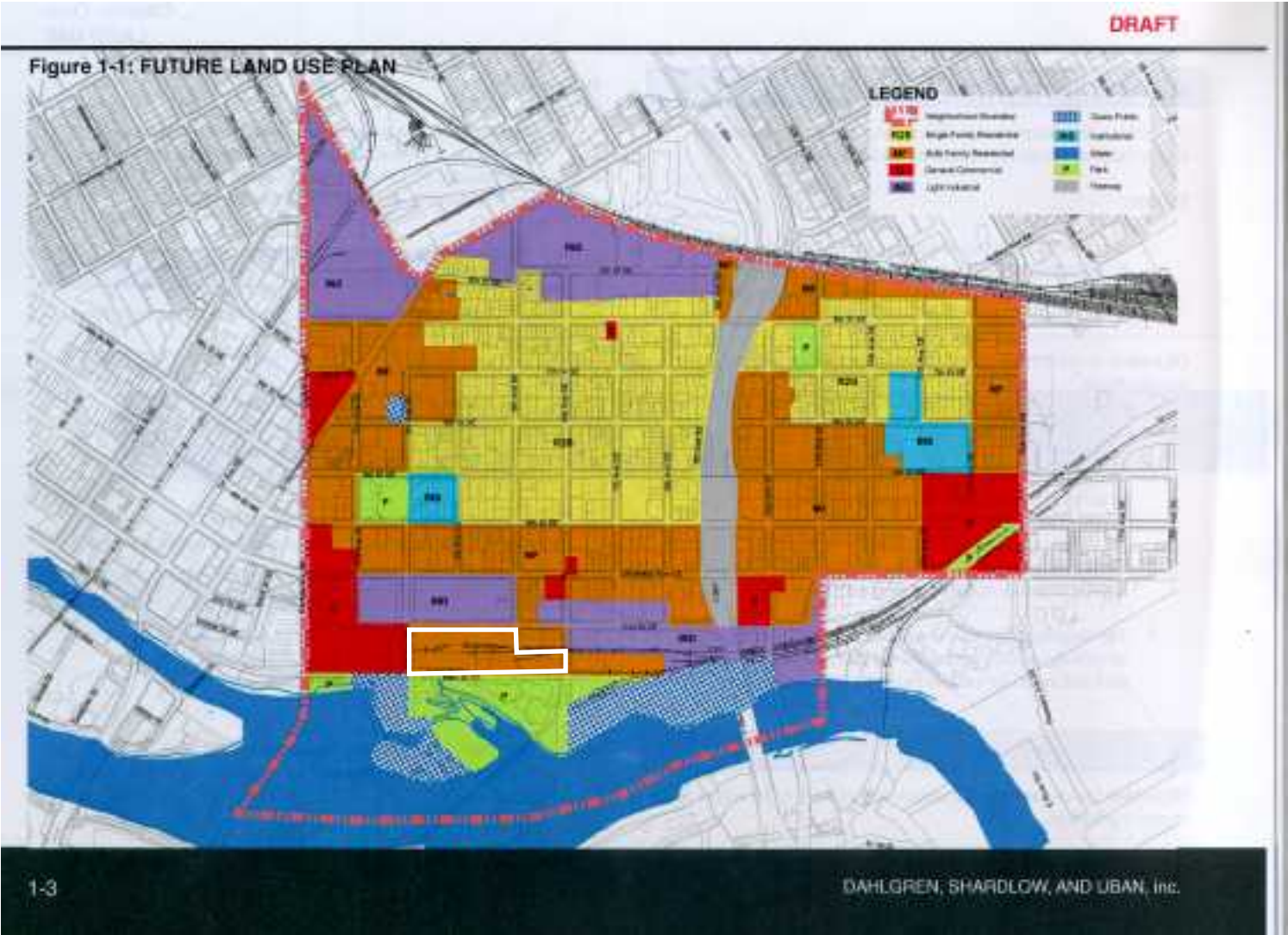
David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)

ENVIRONMENTALASSESSMENT
WORKSHEET

FIGURE 9.4

St. Anthony Falls
Historic District



Source: Marcy Holmes Neighborhood

<div data-bbox="285 1304 541 1331" data-label="Text"><p>SchaferRichardson, Inc.</p></div> <div data-bbox="249 1385 577 1412" data-label="Text"><p>David Braslau Associates, Inc.</p></div>	<div data-bbox="911 1325 1314 1456" data-label="Section-Header"><p>Pillsbury A Mill Complex (Minneapolis, Minnesota) ENVIRONMENTALASSESSMENT WORKSHEET</p></div>	<div data-bbox="1560 1338 1883 1443" data-label="Caption"><p>FIGURE 9.5 Marcy-Holmes Neighborhood Future Land Use Plan</p></div>
--	--	--

Recent Past Land Use: This is discussed in detail in Question 25 under Archaeological, Historical, and Architectural Resources.

Current Land Use: At the time of the Phase 1 assessment (May 2003), the Site was owned and operated by the ADM Milling Company as a flour milling and packaging complex, which consisted of an approximate two and one-half block area near the St. Anthony Falls area of the Mississippi River. The Site was formerly operated as the historic Pillsbury Flour Mills Company “A” Mill. Milling and packaging were terminated at this location on October 7, 2003.

Laterally, the two and one-half block site is situated in a northwest to southeast angle along the river, but for clarity purposes it will be referred to in a straight east/west orientation. The Site is bisected laterally by railroad tracks. The railroad land has also been purchased from the Burlington Northern and Santa Fe Railway Company and is an integral part of this Project.

A number of buildings, both stand-alone and shared-wall, were located on the Site at the time of the Phase 1 Assessment. A vacant two-story brick building, formerly used as a machine shop for the mill, was located at the southeast corner of 2nd Street SE and 3rd Avenue SE. East of the machine shop building was an open parking lot. East of the parking lot was a massive cluster of 64 concrete grain silos (16 wide by 4 deep), which were situated between 2nd Street SE and the railroad. Located between the east end of the concrete silos and 5th Avenue SE was a vacant four-story brick building formerly used as a mill warehouse, referred to as Warehouse #2.

Located on the south side of the railroad property, a cluster of shared-wall buildings was located near the southwest portion of the Site and included the historic “A” Mill building, a 5-story “Cleaning House” situated atop grain silos, the “South A Mill Building”, and the elongated Warehouse #1 building located along Main Street. A square-shaped cluster of reddish colored tile grain silos with 5 stories atop were located where 4th Avenue SE once was platted through the site. A steel-sided building addition, recently vacated by Manildra Milling, was located on the east side of the tile silos. A former Pillsbury research and development building, now vacant and referred to as the annex building, was located at the northwest corner of Main Street and 5th Avenue SE. A fence-enclosed parking lot, leased to equipment rental company United Rentals, was located south of the railroad property and north of Main Street between 5th and 6th Avenues SE.

The Site is bordered on the north by 2nd Street SE with the General Mills (“Technology East”) Research Facility located beyond; on the northeast by No Name Exhibitions @ The Soap Factory, United Rentals, and W.D. Forbes Company, with 6th Avenue SE and the Stone Arch Apartments located beyond; on the south by Main Street SE with the Father Hennepin Bluff Park, former Pillsbury power substation, and the Excel Energy hydroelectric plant and power substation located southwest across 3rd Avenue SE; and on the west by 3rd Avenue SE with a General Mills data center building (the Diageo site) and St. Anthony Main located beyond. The Site is located in a mixed commercial, industrial, and residential area of the City of Minneapolis.

Environmental Issues: Phase 1 and Phase 2 Environmental Site Assessments were performed at the site in May 2003. The Phase 1 assessment revealed no documented environmental hazards except for ground water contamination found in a monitoring well near the northwest corner of the site. The contamination is from an off-site source, but may be assumed to extend under the northern portion of the site based on groundwater flow directions. The Phase 2 assessment revealed low levels of organic and metals contamination at the site, but at concentrations below or near levels acceptable for residential use.

The Phase 1 environmental site assessment documented the presence of four 30,000 gallon underground liquid propane tanks. These underground tanks will be removed prior to site development.

A Preliminary Hazardous Building Material Inspection was performed in April 2003, which created an inventory of asbestos-containing materials, lead-containing paint, and other common miscellaneous building materials that will require separate handling and disposal prior to demolition (e.g. light ballasts, mercury switches, air conditioners, etc.), but which pose no conflict with the proposed land use.

Potential (but currently unverified) environmental hazards may include petroleum and/or other spill contamination, undocumented underground storage tanks, and historical demolition wastes of unknown type buried at the site. These potential hazards, common for this type of property, are primarily based on the long history of industrial uses at the site.

Potential hazards from known past land use were evaluated through the drilling of 29 soil borings and the excavation of six test pits located across the site in areas judged most likely to encounter potential subsurface hazards. Field observations and subsequent chemical analytical testing from the soil borings and test pits show that no significant environmental hazards exist at the locations tested. Based on the borehole and test pit siting criteria, it is likely that these results fairly characterize subsurface environmental hazards at the site from known past land uses.

None of the environmental hazards known or suspected at the site present significant conflicts with the proposed land use, and are expected to be managed through preparation of an environmental contingency plan prior to redevelopment.

10. COVER TYPES

Estimate the acreage of the site with each of the following cover types before and after development:

	Before	After		Before	After
Types 1 to 8 Wetlands	0	0	Lawn/Landscaping	0.37	1.15
Wooded/Forest	0	0	Impervious surfaces	7.53	6.75
Brush/Grassland	0	0	Other		
Cropland	0	0			
			Total area	7.9	7.9

If Before and After totals are not equal, explain why:

The site is and has been totally developed for industrial use, delivery, storage, and cartage. The redevelopment of the site will create heavily landscaped boulevards, walkways and plazas or rooftop gardens over the parking decks. The landscaped areas will provide some storm water mitigation, in the form of surge protection from storm runoff. The landscaped roofs will reduce the urban heat island effect by providing shade and thermal mass.

11. FISH, WILDLIFE AND ECOLOGICALLY SENSITIVE RESOURCES

a. Identify fish and wildlife resources and habitats on or near the site and describe how they would be affected by the project. Describe any measures to be taken to minimize or avoid impacts.

The project site, contained in the east half of Section 23, is characterized as a fully developed industrial area that has been developed for more than 100 years. The project site consists of industrial and commercial buildings (grain silos, warehouses, grain milling operation buildings, and other multistory commercial buildings), city streets, parking lots, and railroad tracks; there are no undeveloped green spaces within the project area. Vegetation is limited to isolated small boulevard lawns and associated boulevard trees. Consequently, there are no significant wildlife habitats within the project site.

The project site is flanked on the northwest by the St. Anthony Main commercial center, on the northeast by multiple commercial buildings, and on the southeast by a large metals-related industrial building, a new apartment complex and other commercial buildings. On the southwest, the site is flanked by the Father Hennepin Bluff Park, which is comprised of a small upland park area, very steep wooded slopes down to the river, and a lower wooded area with walking trails along the Mississippi River.

b. Are any state-listed (endangered, threatened or special concern) species, rare plant communities or other sensitive ecological resources such as native prairie habitat, colonial waterbird nesting colonies or regionally rare plant communities on or near the site? ■ Yes □ No

If yes, describe the resource and how it would be affected by the project. Indicate if a site survey of the resources has been conducted and describe the results. If the DNR Natural Heritage and Nongame Research program has been contacted give the correspondence reference number: Describe measures to minimize or avoid adverse impacts.

Both the MN Department of Natural Resources and the US Fish and Wildlife Service were contacted to request their review of potential impacts to fish and wildlife or other significant natural features. No specific on-site biological surveys were performed as a part of this evaluation.

The Minnesota Department of Natural Resources Natural Heritage and Nongame Research Program reviewed its files in June, 2003 for reported locations of threatened, endangered and special concern species located within one mile of the project area. According to their report, dated June 24, 2003 (see Appendix to Question 11), there are a total of seven known occurrences of rare species or animal aggregation sites in the area searched, but only one such occurrence in the project area which they feel *may* be impacted. Their report noted that the proposed project is located directly over Chute's Cave, which supports the largest number of hibernating Eastern Pipistrelles (bats) in the state, a species of Special Concern. Their listed concern is that any subsurface modifications to the cave and associated tunnels could render the site unsuitable for the bat colony through changes in temperature or humidity. Recently performed geotechnical engineering evaluations have concluded that no subsurface work is needed that would intersect the cave or tunnels, and therefore no impacts from such activity are anticipated.

The response from the US Fish and Wildlife Service, dated July 17, 2003 (see Appendix to Question 11), notes that the federally-threatened bald eagle and Higgin's eye pearly mussel are known to occur in Hennepin County, but concludes that "no effects to federally listed or proposed threatened or endangered species are anticipated."

Because the proposed project is not anticipated to pose any significant risk to threatened, endangered, or special concern species identified by either the Minnesota DNR or the US Fish and Wildlife Service, specific mitigation measures are not currently proposed. Should it be discovered that subsurface foundation work is required that may impact Chute's Cave or associated tunnels, such work will be designed and constructed in consultation and coordination with the MN Department of Natural Resources.

12. PHYSICAL IMPACTS ON WATER RESOURCES

Will the project involve the physical or hydrologic alteration — dredging, filling, stream diversion, outfall structure, diking, and impoundment — of any surface waters such as a lake, pond, wetland, stream or drainage ditch? ☐ Yes ☒ No

If yes, identify water resource affected and give the DNR Protected Waters Inventory number(s) if the water resources affected are on the PWI. Describe alternatives considered and proposed mitigation measures to minimize impacts.

N/A

13. WATER USE

Will the project involve installation or abandonment of any water wells, connection to or changes in any public water supply or appropriation of any ground or surface water (including dewatering)?

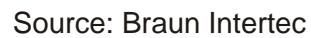
☒ Yes ☐ No

If yes, as applicable, give location and purpose of any new wells; public supply affected, changes to be made, and water quantities to be used; the source, duration, quantity and purpose of any appropriations; and unique well numbers and DNR appropriation permit numbers, if known. Identify any existing and new wells on the site map. If there are no wells known on site, explain methodology used to determine.

One water supply well is known to be present, and is located adjacent to the Red Tile Elevator. The well is reportedly 230 feet deep, is likely finished in the Prairie du Chien Formation, and may be used for on-site irrigation. A second well, used as an environmental monitoring well related to a nearby release, is also present near the northeast corner of the property, and is reportedly finished in the Platteville Formation. Disposition of this well will be evaluated with the MPCA during detailed redevelopment construction planning. Locations of wells are shown on FIGURE 13.1.

Since saturated conditions were not encountered in fill, granular soils, or Platteville Formation during geotechnical investigations recently performed at the site, temporary dewatering wells are not expected to be installed or used during redevelopment construction. Should it be discovered that such wells are needed, they will be permitted through the Department of Natural Resources Appropriation Permit process.

The proposed redevelopment project will obtain potable water from the City of Minneapolis trunk system. Estimated water demand is based upon the Service Availability Charge Procedure Manual (Metropolitan Council – Environmental Services, January 2004). One SAC Unit (274 gallons per day representing peak day usage) is assigned to each residential unit. One SAC unit is assigned to each 3,000 SF of retail space. Not taking into account credits for existing water use on the site, it is estimated that 1,130 SAC units or a maximum of 309,620 gallons during a peak day could be required for the project at buildout and full occupancy. Discussions with the City of Minneapolis indicate that adequate potable supplies are adequate to meet the needs of the proposed redevelopment without modifications to their existing system.



David Braslau Associates, Inc.

ENVIRONMENTAL ASSESSMENT WORKSHEET

Well Location Map

14. WATER-RELATED LAND USE MANAGEMENT DISTRICT

Does any part of the project involve a shoreland zoning district, a delineated 100-year flood plain, or a state or federally designated wild or scenic river land use district? ■ Yes □ No

If yes, identify the district and discuss project compatibility with district land use restrictions.

The project is located within the state-designated Mississippi River Critical Area Corridor (Corridor). The 1976 Corridor designation was reaffirmed by Executive Order 79-19, published in the Minnesota State Register in 1979, and the designation made permanent in 1979. The Order provides standards and guidelines for preparing plans and regulations for the corridor. The Minnesota DNR had identified portions of these standards and guidelines within which the compatibility of the proposed development should be evaluated (see the Minnesota DNR memoranda on structure height and the Pillsbury A Mill proposal in the Appendix to Question 14). These elements are listed below and followed by comments related to the proposed project. The state Corridor boundary is the same as the 1988 boundary of the federally-designated Mississippi National River and Recreation Area (MNRRA). See FIGURE 14.1 and Question 25.

A. Purpose and responsibility

1. Purposes. The purposes of the critical area designation and the following standards and guidelines are:

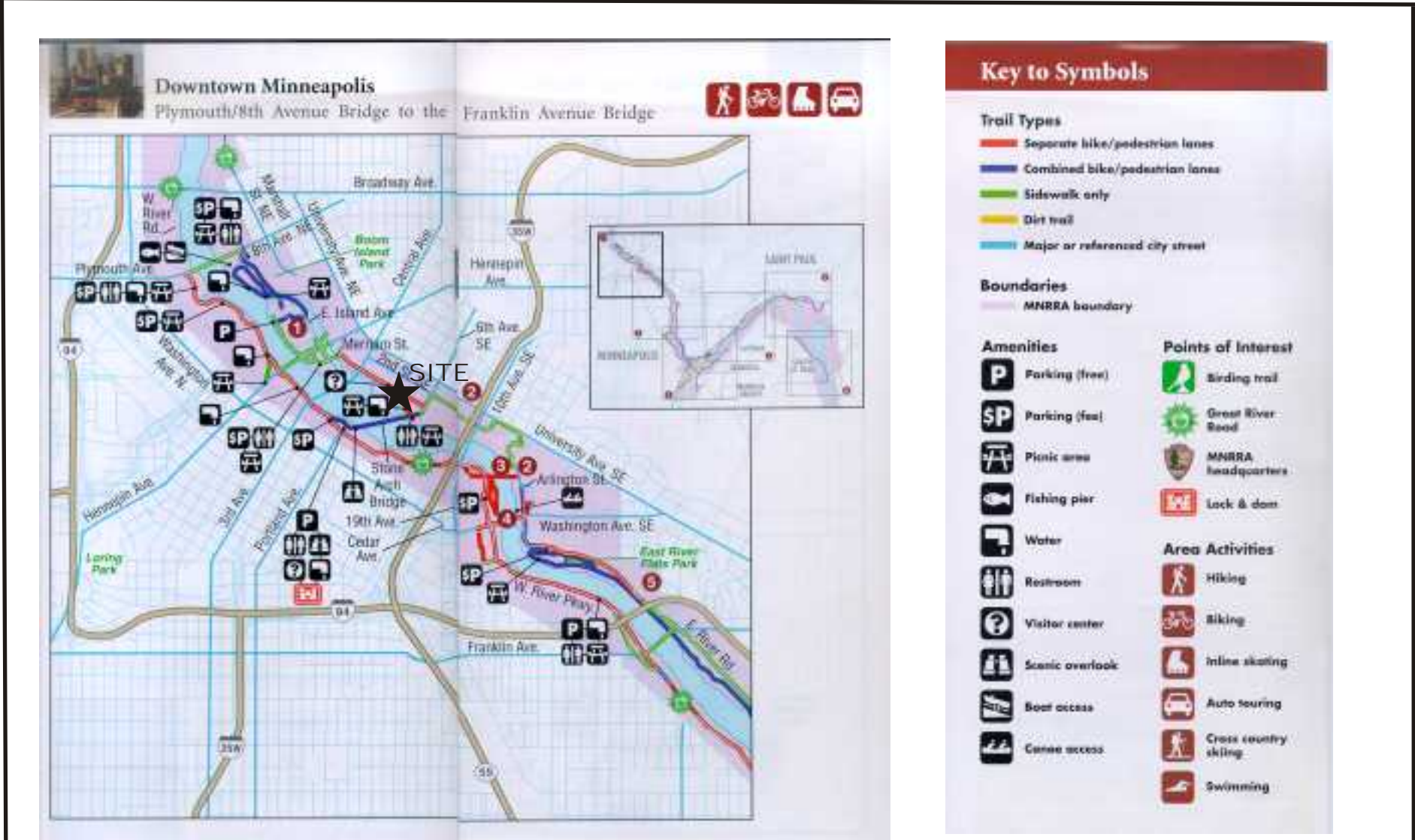
- a. To protect and preserve a unique and valuable state and regional resource for the benefit of the health, safety and welfare of the citizens for the state, region, and nation;*
- b. To prevent and mitigate irreversible damage to this state, regional, and national resource;*
- c. To preserve and enhance its natural, aesthetic, cultural, and historical value for the public use;*
- d. To protect and preserve the river as an essential element in the national, state and regional transportation, sewer and water and recreational systems; and*
- e. To protect and preserve the biological and ecological functions of the corridor.*

The proposed project will maintain historically designated resources and replace other industrial uses that did not rely upon access to the Mississippi River. The project is consistent with the long term goals and objectives of the City and the pattern of public and private investment in the remainder of the central riverfront.

B. General guidelines for preparing plans and regulations

2. In order to manage the river corridor consistent with its natural characteristics and its existing development, the following guidelines are established for each corridor district:

- b. Urban diversified district. The lands and waters within this district shall be used and developed to maintain the present diversity of commercial, industrial, residential, and public uses of the lands, including the existing transportation use of the river; to protect historical sites and areas, natural scenic and environmental resources; and to expand public access to and enjoyment of the river. New commercial, industrial, residential, and other uses may be permitted if they are compatible with these goals.*



Source: National Park Service

<p>SchaferRichardson, Inc.</p> <p>David Braslau Associates, Inc.</p>	<p>Pillsbury A Mill Complex (Minneapolis, Minnesota)</p> <p>ENVIRONMENTALASSESSMENT WORKSHEET</p>	<p>FIGURE 14.1</p> <p>Mississippi National River and Recreation Area</p>
--	---	--

The project will provide new commercial and residential uses that will be designed and constructed within the parameters established by the City of Minneapolis and zoning requirements that are applicable to development within the MNRRRA.

C. Specific standards and guidelines for preparing plans and regulations

1. Each local unit of government within the river corridor shall prepare plans and regulations to protect environmentally sensitive areas in accordance with the following guidelines.

a. Each local unit of government shall, with the assistance of the Metropolitan Council and state agencies:

(4) Prepare plans and regulations to protect bluffs greater than 18% and to provide conditions for the development of bluffs between 18% and 12% slopes;

The project will not affect the river bluffs.

C.1.a (5) Prepare plans and regulations to minimize direct overland runoff and improve the quality of runoff onto adjoining streets and watercourses;

The project will be designed so as not to adversely impact adjacent streets and the Mississippi River.

C.1.a (6) Prepare plans and regulations to minimize site alteration and for beach and riverbank erosion control;

The project will not impact any existing natural areas and will replace industrial uses.

C.2. Each local unit of government and state agency shall prepare plans and regulations to protect and preserve the aesthetic qualities of the river corridor, which provide for the following considerations:

a. Site Plans. Site plans shall be required to meet the following guidelines:

(1) New development and expansion shall be permitted only after the approval of site plans which adequately assess and minimize adverse effects and maximize beneficial effects.

(2) Site plans shall be required for all developments for which a development permit is required, except for the modification of an existing single-family residential structure or the construction of one single-family residence.

(3) Site plans shall include, but not be limited to, the submission of an adequate and detailed description of the project, including activities undertaken to ensure consistency with the objectives of the Designation Order; maps which specify soil types, topography, and the expected physical changes in the site as the result of the development; the measures which address adverse environmental effects.

(4) Site plans shall include standards to ensure that structure, road, screening, landscaping, construction placement, maintenance, and storm water runoff are compatible with the character and use of the river corridor in that district.

(5) Site plans shall provide opportunities for open space establishment and

for public viewing of the river corridor whenever applicable, and shall contain specific conditions with regard to buffering, landscaping, and re-vegetation.

This EAW addresses environmental concerns and designs to ensure minimal impact on the natural and man-made environment. Detailed design features of individual components of the project will be subject to review and approval during the design phase of the project components.

C.2.b. Structures. Structure site and location shall be regulated to ensure that riverbanks, bluffs and scenic overlooks remain in their natural state, and to minimize interference with views of and from the river, except for specific uses requiring river access.

The project will not impact the natural state of the riverbank, bluffs or scenic overlooks. The project will replace a large grain elevator that currently blocks visual access to the river. Some portions of the project may add new buildings that could block views of the river, although view of the downtown are more critical in terms of building design.

C.6. Local units of government and regional and state agencies shall develop plans and regulations to maximize the creation and maintenance of open space and recreational potential of the Corridor in accordance with the following guidelines: (see EO 79-19)

The proposed development will not negatively impact any of the adjacent parks or trail systems that have been established or that are planned by the City of Minneapolis.

C.6.f. In the development of residential, commercial and industrial subdivisions, and planned development, a developer shall be required to dedicate to the public reasonable portions of appropriate riverfront access land or other lands in interest therein.

In the event of practical difficulties or physical impossibility, the developer shall be required to contribute an equivalent amount of cash to be used only for the acquisition of land for parks, open space, storm water drainage areas or other public services within the River Corridor.

The proposed project will provide new access to the river from areas north of the project through a newly constructed 5th Avenue from 2nd to Main Street and pedestrian access through the project from in the vicinity of 4th Avenue.

C.7. Local units of government and state agencies shall develop plans and regulations for transportation and public utilities developments in accordance with the following guidelines:

a. Existing and potential utility and transportation facility crossings shall be identified and river crossings shall be minimized and concentrated at existing crossings where possible.

b. The Corridor shall not be used merely as a convenient right-of-way and new or modified transportation and utility facilities shall complement the planned land and water uses and shall not stimulate incompatible development.

c. In planning and designing the construction or reconstruction of all public transportation facilities which occur within the river corridor, consideration shall be given to the provision of scenic overlooks for motorists, safe

pedestrian crossings and facilities along the River Corridor, access to the riverfront in public ownership and reasonable use of the land between the river and the transportation facility.

The project will not directly impact any existing or planned pedestrian facilities and as noted above, will provide new access corridors to the river along both 4th and 5th Avenues.

C.8. Local units of government and regional and state agencies shall develop capital improvement programs which are consistent with the following guidelines:

- a. A five year capital improvement program or public facilities program shall be developed which covers all public projects to be sited in the corridor.*
- b. The capital improvement program or public facilities program shall specify the sequence of actions to be undertaken by each public agency and shall be consistent with the standards and guidelines in Section B and C.*

15. WATER SURFACE USE

Will the project change the number or type of watercraft on any water body? ☐ Yes ☒ No

If yes, indicate the current and projected watercraft usage and discuss any potential overcrowding or conflicts with other uses.

N/A

16. EROSION AND SEDIMENTATION

Give the acreage to be graded or excavated and the cubic yards of soil to be moved:

acres: 6.27; cubic yards: 203,700

Describe any steep slopes or highly erodible soils and identify them on the site map. Describe any erosion and sedimentation control measures to be used during and after project construction.

The project site has been previously developed. The general soil profile of the site consists of 2 to 22 feet of debris and rubble-laden fill underlain by native granular soils. The exception being occasional glacial till clay layers that were encountered at depth in multiple locations across the site. Below the fill and native granular soils, bedrock was encountered. It appears the bedrock elevation generally ranges from 796 to 798, with some areas when the rock surface is up to 5-8 feet lower than the general elevation.

Seven of the existing buildings on this site will remain in place and be renovated, while the others will be demolished and new buildings constructed. The proposed buildings will have underground parking levels that generally extend to near the bedrock surface. The lowest elevation of the below-grade parking levels is approximately 785. During construction, lateral support of the adjacent streets should be considered during the excavation for the below-grade levels. In areas where the excavation extends close to the street or curbs, some temporary shoring may be required.

The existing site has 7.53 acres of impervious surface. This represents 95% of the 7.90 acre project area. The proposed project will result in a decrease in impervious surface. The developed site will

contain 6.75 acres of impervious surface and 1.15 acres of grass or lawn area. The building roof drains will be connected to storage tanks located in the garage levels and the runoff will be treated prior to discharge into the City storm sewer. The stormwater treatment will be designed to remove 70% of total suspended solids and meet rate control requirements based on connection capacity.

If stormwater runoff in the excavated area does not dissipate in a reasonable amount of time, dewatering may be required. Adequate sediment removal is required before the pumped water is discharged off-site. Best management practices to remove sediment prior to discharge may include filtered sump pits, sediments traps, sedimentation basins, or geotextile filters. The appropriation and discharge of water may require additional permits.

An MPCA General Storm Water Permit for Construction Activity will be required for this project. The permit requires that a Storm Water Pollution Prevention Plan (SWPPP) be developed that identifies appropriate best management practices to be used during construction to minimize erosion and sedimentation. Once the overall site is permitted by the original owner, the new owner/operator of each construction site will need to submit a subdivision registration form to permit their site. Under this permit, different owners/operators are covered by the original permit and may use the previously developed SWPPP.

17. WATER QUALITY: SURFACE WATER RUNOFF

a. Compare the quantity and quality of site runoff before and after the project. Describe permanent controls to manage or treat runoff. Describe any stormwater pollution prevention plans.

The quantity of site runoff will be slightly reduced after the project due to the reduction in impervious surface area. For a 100-year, 24-hour rainfall event of 6.0", the existing site runoff is 53 cfs, while the proposed site runoff is 51 cfs. There may be rate control requirements based upon the discharge location.

The quality of site runoff will be improved after the project. Currently, the site is 95% impervious with no water quality treatment of runoff. Before the project, there is a greater percentage of area used for driveways and parking with the potential for pollution caused by leaking vehicle fluids and deicing materials. After development, the impervious area will be reduced to 85% of the total area. The area of parking lots and driveways is being decreased by approximately 20%. Also, treatment of the runoff will be provided by storage tanks in the parking levels that will be designed to remove 70% of the total suspended solids prior to discharge off site.

The proposed landscaping will be located adjacent to and above the parking decks. There will be well-designed and controlled green space areas after the project, so impacts from landscape maintenance, such as fertilizers and pesticides, should not be significant.

A Storm Water Pollution Prevention Plan will need to be developed and implemented for this project that uses best management practices to prevent erosion, minimize sediment in runoff and minimize other forms of pollution.

b. Identify routes and receiving water bodies for runoff from the site; include major downstream water bodies as well as the immediate receiving waters. Estimate impact runoff on the quality of receiving waters.

Stormwater runoff from the site will be piped into the City of Minneapolis stormwater collection system under Main Street, which then is directed into the Phoenix Mill Tunnel, which in turn discharges to the Mississippi River near the project site. Based on the City of Minneapolis requirement for 70% removal of total suspended solids, future stormwater runoff treated to this standard will be a significant improvement over current stormwater runoff water quality. Therefore, no negative impacts to the receiving water are anticipated.

18. WATER QUALITY: WASTEWATERS

a. Describe sources, composition and quantities of all sanitary, municipal and industrial wastewater produced or treated at the site.

Estimated peak sanitary wastewater produced on the site from residential and commercial uses is 309,620 gallons per day, based upon estimated peak water consumption.

The development is not expected to produce any wastewater that requires special treatment.

b. Describe waste treatment methods or pollution prevention efforts and give estimates of composition after treatment. Identify receiving waters, including major downstream water bodies, and estimate the discharge impact on the quality of receiving waters. If the project involves on-site sewage systems, discuss the suitability of site conditions for such systems.

Sanitary wastewater will be directed to the City of Minneapolis sanitary sewer system, which consists of existing sanitary sewer main along Main Street and 2nd Avenue SE, and interceptor tunnels along 5th Avenue SE and 2nd Avenue SE. The sanitary sewer mains may need to be extended to serve the entire site.

c. If wastes will be discharged into a publicly owned treatment facility, identify the facility, describe any pretreatment provisions and discuss the facility's ability to handle the volume and composition of wastes, identifying any improvements necessary.

Wastes will be discharged to the Metropolitan Wastewater Treatment Plant. There are no proposed pretreatment provisions.

d. If the project requires disposal of liquid animal manure, describe disposal technique and location and discuss capacity to handle the volume and composition of manure. Identify any improvements necessary. Describe any required setbacks for land disposal systems.

N/A

19. GEOLOGIC HAZARDS AND SOIL CONDITIONS

a. Approximate depth (in feet) to:

	Minimum	Average
Ground Water:	50 feet	50 feet
Bedrock:	8 feet	22 feet

Describe any of the following geologic site hazards to ground water and also identify them on the site map: sinkholes, shallow limestone formations or karst conditions. Describe measures to avoid or minimize environmental problems due to any of these hazards.

Bedrock encountered during site geotechnical investigations range in elevation from 788 to 805 feet above mean sea level, and depths to bedrock range from 8 to 56 feet below grade. The uppermost bedrock encountered is the Platteville Formation, which is composed of a somewhat fractured dolomitic limestone. Ground water was not observed in the Platteville Formation during geotechnical drilling, but is believed to exist in this geologic unit in its lower portion, at least in places, and is likely affected by seasonal fluctuations. Persistent saturated conditions exist in the underlying St. Peter Sandstone, where water level elevations are near river level and fluctuate with river levels (approximately 750 feet). No hazards to ground water are anticipated related to the proposed construction.

Some karst conditions in the Platteville Formation are known in the vicinity of the site, where a feature known as Chute's Cave is located. The location of the cave is generally under Main Street SE and a small area under the existing A Mill, Warehouse #1, and Red Tile Elevator. A relatively large portion of the cave reportedly collapsed in 1881, which also affected the overlying Main Street.

Current plans are for townhomes and retail spaces to be constructed within the existing buildings over a portion of the area of the 1881 collapse and a small portion of the cave. Since these foundations and buildings have been in place for approximately 100 years, there appears to be little likelihood of further collapse. Accordingly, hazards to groundwater or to the cave itself are not anticipated.

b. Describe the soils on the site, giving NRCS (SCS) classifications, if known. Discuss soil granularity and potential for groundwater contamination from wastes or chemicals spread or spilled onto the soils. Discuss any mitigation measures to prevent such contamination.

The Soil Survey of Hennepin County (USDA, April, 1974) was reviewed for project site soils mapping. In the project area, soils are unmapped by USDA, likely due to the extensive development and related fill placement that was present at the time of the mapping.

Geotechnical borings and test pits were recently performed at the site (Braun Intertec geotechnical report dated May, 2003), and the logs of the 29 soil borings and 7 test pits show a general soil profile of fill (two to 22 feet in thickness, and varying considerably in content and compaction) over native granular soils (poorly graded sand and poorly graded sand with silt). In seven of the

borings, glacial till was encountered at depth and was generally observed to be interbedded with the granular sediments.

Given the variability of the type and compaction of the fill and the presence of granular soils underlying the fill, the project site is somewhat susceptible to vertical movement of liquid contaminants or contaminants entrained in liquids. However, the proposed project, being comprised of commercial and residential redevelopment, is not anticipated to involve any significant commercial storage of potential contaminants (in either liquid or solid form). The project will require on-site fuel storage tanks (e.g. fuel tanks for backup electrical generation). Such tanks are regulated and require secondary containment and/or periodic leak testing. Therefore, potential contaminant impacts are anticipated to be minimal from these sources.

Also, the completed project will have relatively small areas of pervious surfaces for percolation of contaminants. These pervious areas will be limited to lawn and landscaped areas, which will not also be used for potential contaminant storage. Therefore, specific mitigation measures for control of potential contaminants are not currently proposed.

20. SOLID WASTES, HAZARDOUS WASTES, STORAGE TANKS

a. Describe types, amounts and compositions of solid or hazardous wastes, including solid animal manure, sludge and ash, produced during construction and operation. Identify method and location of disposal. For projects generating municipal solid waste, indicate if there is a source separation plan; describe how the project will be modified for recycling. If hazardous waste is generated, indicate if there is a hazardous waste minimization plan and routine hazardous waste reduction assessments.

Demolition waste will be generated prior to redevelopment, which will consist of concrete, steel bituminous, and various building materials. Asbestos-containing materials were inventoried in April, 2003, and will be removed prior to demolition and disposed of appropriately in a licensed landfill. Lead-based paint and other hazardous building materials (e.g. fluorescent lamps, light ballasts, mercury switches, appliances, fuel, paint, cleaning supplies, etc.) were also inventoried and will be removed prior to demolition and disposed of according to state and federal rules. Nonhazardous demolition waste will be disposed of in a demolition landfill.

Solid waste generation for the completed project will consist almost exclusively of mixed municipal waste generated by residential housing. Volumes of municipal waste are estimated at 12 tons per week. Recycling facilities will be located at appropriate sites throughout the development. Pickup of recycled material is expected to occur on a daily basis. Garbage compactors will also be located throughout the development. Mixed municipal solid waste that is not recycled will either be incinerated at the Hennepin County Energy Recovery Center or hauled to a sanitary landfill by waste haulers licensed by the City of Minneapolis. Source separation of municipal waste is required in the City of Minneapolis, which therefore defines the source separation plan.

Hazardous waste is expected to be generated in very small amounts, if at all, by commercial tenants, space for which is planned to total of 105,000 square feet in three separate locations. Tenants such as small commercial establishments that may generate hazardous waste from such activities as disposal of cleaning supplies are often classified as Very Small Quantity (VSQ) generators, and they will be responsible for appropriately disposing of such limited waste.

b. Identify any toxic or hazardous materials to be used or present at the site and identify measures to be used to prevent them from contaminating groundwater. If the use of toxic or hazardous materials will lead to a regulated waste, discharge or emission, discuss any alternatives considered to minimize or eliminate the waste, discharge or emission.

As discussed above, some commercial tenants may be VSQ generators, but the amounts and storage of such wastes are not anticipated to present any substantial risk to soil or ground water contamination.

c. Indicate the number, location, size and use of any above or below ground tanks to store petroleum products or other materials, except water. Describe any emergency response containment plans.

It is anticipated that there will be up to 12 emergency electrical generators at the site upon completion of construction. Each generator will have a diesel fuel tank, located in the parking level of each structure. The size of the fuel tanks will range from 500 to 1000 gallons. Such tanks are regulated by MPCA, and require secondary containment and/or periodic leak testing. All tanks are planned to be above-ground tanks, which will facilitate leak detection, should any occur. Emergency response plans will be developed for the generators to plan for appropriate reactions to emergency situations. The generators will also require registration permits from the MPCA.

21. TRAFFIC

Parking spaces added: 1,832 Existing spaces (if project involves expansion): 0
Estimated total average daily traffic generated: 10,040 with Full Buildout

Estimated maximum peak hour traffic generated (if known) and time of occurrence:

917 trips per hour between 4:15 and 5:15 pm

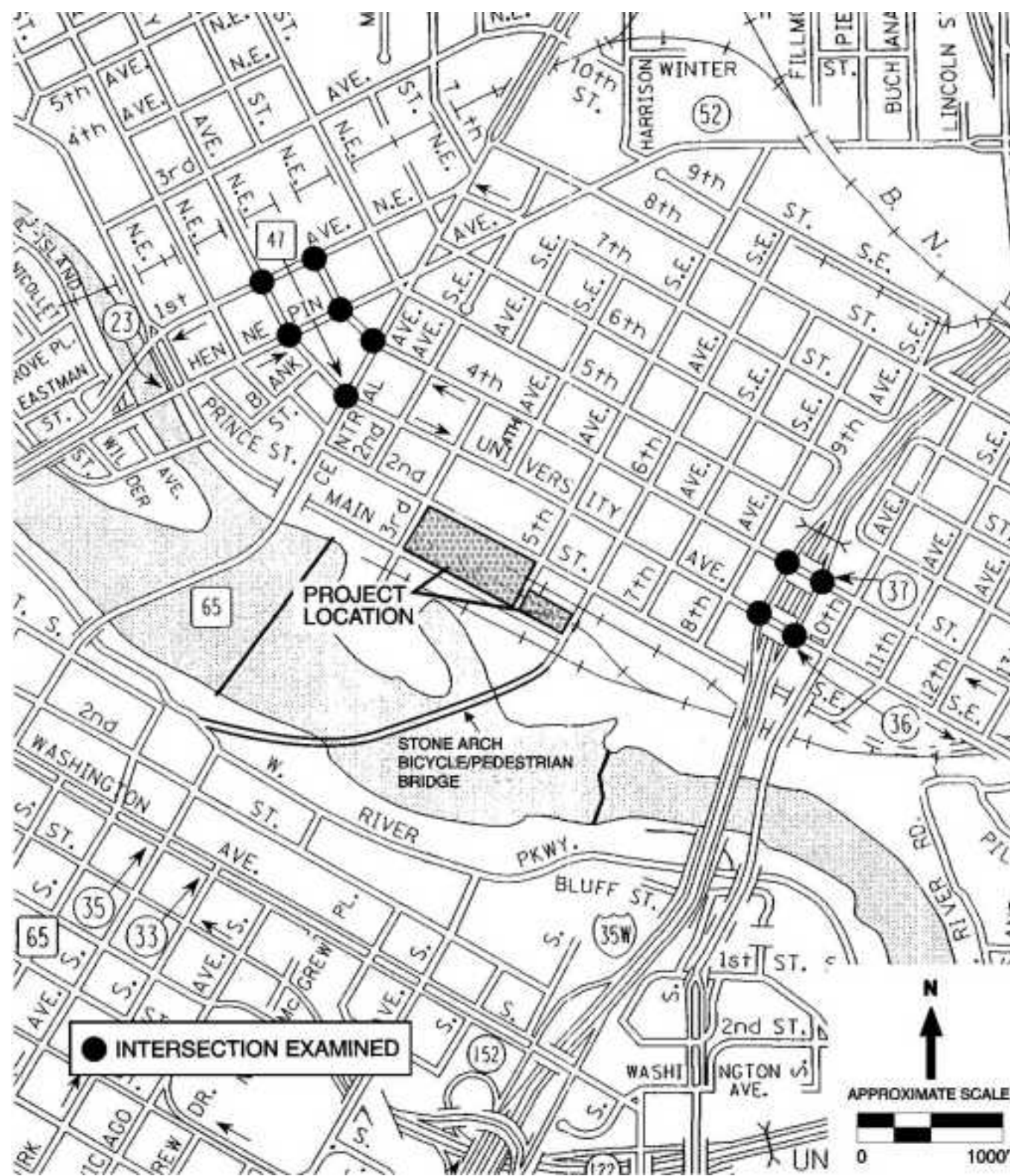
Provide an estimate of the impact on traffic congestion on affected roads and describe any traffic improvements necessary. If the project is within the Twin Cities metropolitan area, discuss its impact on the regional transportation system.

PROPOSED DEVELOPMENT

The site of the proposed Pillsbury A Mill Redevelopment is bounded by Main Street SE, 2nd Street SE, 3rd Avenue SE, and 6th Avenue SE, as shown in FIGURE 21.1. The site will be divided by 5th Avenue SE which will remain open as a public street (it is now private).

The development includes 1,095 residential units, mainly in the form of owner-occupied condominiums. 105,000 sq. ft. of retail uses are also included in the development plan. The development consists of 16 different buildings on the site, some of which are existing buildings that will be remodeled and some of which are new structures. Full redevelopment of the Pillsbury A Mill site is expected to be complete by the year 2012.

The proposed site plan is presented in FIGURE 21.2. As shown in the site plan, the primary locations of vehicle access for the development are mid-block driveways on 3rd, 5th, and 6th Avenues SE. Access to a 24-space surface parking area is provided on 2nd Street SE.



Source: Benshoof & Associates, Inc.

SchaferRichardson, Inc.

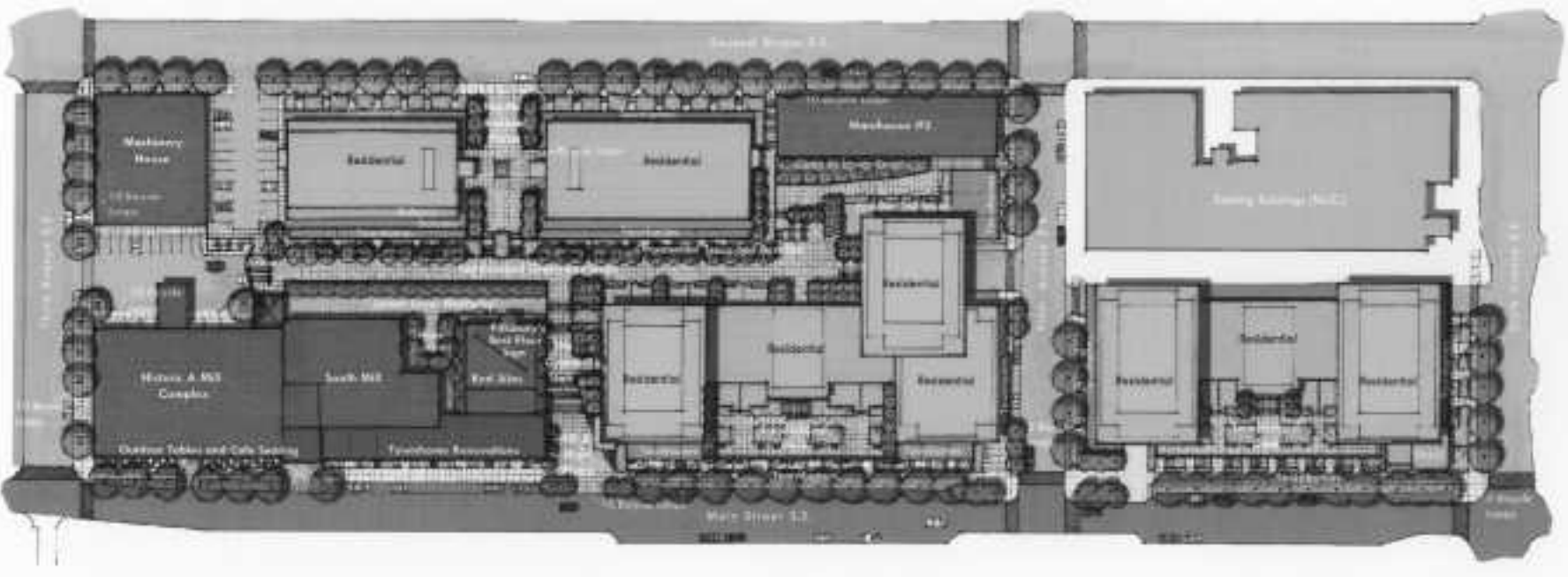
David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)

ENVIRONMENTALASSESSMENT
WORKSHEET

FIGURE 21.1

Location of Intersections for Analysis

<div data-bbox="142 321 1906 971"></div> <div data-bbox="163 1015 583 1036">SOURCE: CLOSE LANDSCAPE ARCHITECTURE</div>		
<div data-bbox="283 1304 541 1331">SchaferRichardson, Inc.</div> <div data-bbox="247 1385 577 1412">David Braslau Associates, Inc.</div>	<div data-bbox="974 1325 1253 1380">Pillsbury A Mill Complex (Minneapolis, Minnesota)</div> <div data-bbox="911 1404 1316 1456">ENVIRONMENTALASSESSMENT WORKSHEET</div>	<div data-bbox="1646 1338 1799 1365">FIGURE 21.2</div> <div data-bbox="1673 1391 1772 1419">Site Plan</div>

OTHER ANTICIPATED DEVELOPMENT

Based on information provided by the City of Minneapolis and the developer, three other developments are anticipated in the vicinity of the Pillsbury A Mill Complex and are to be accounted for in the traffic forecasts and analyses.

Southeast Minneapolis Industrial (SEMI) / Bridal Veil Refined Master Plan

The City of Minneapolis has developed a master plan and prepared an AUAR for redevelopment of industrial areas northeast of the University of Minneapolis. This large-scale redevelopment is expected to be completed over several years with final the final stages being occupied in 2020. The AUAR for this redevelopment area includes three levels of development intensity. The mid-intensity alternative includes about 900 residential unites, 1.7 million sq. ft. of commercial development, and about 900,000 sq. ft. of industrial development

Diageo Site

The Diageo site is across the street from the Pillsbury A Mill redevelopment site, just west of 3rd Avenue SE. Although a specific development plan or schedule has not been established, Schafer Richardson, Inc. indicated that the maximum expected development of this site is 150 dwelling units and 8,800 sq. ft. of retail uses. Completion of this development is expected to before 2012, the estimated completion of the entire Pillsbury A Mill Project redevelopment.

Stone Arch Apartments

The Stone Arch Apartments are located to the east of the Pillsbury A Mill complex site, just east of 6th Avenue SE. A TDMP was prepared for this development in August 2001. That development includes 265 rental units. According to the TDMP, full occupancy was anticipated by the end of 2003. The development was not yet occupied when traffic counts were collected in June of 2003 and, thus, will be accounted for as part of the no-build traffic conditions.

FRAMEWORK FOR TRAFFIC FORECASTS AND ANALYSES

Based on discussions with City staff, the following ten intersections have been selected for p.m. peak hour forecasts and analyses:

University Avenue intersections with:

- 1st Avenue SE
- Hennepin Avenue
- Central Avenue
- Southbound I-35W On-Ramp
- Northbound I-35W Off-Ramp

4th Street intersections with:

- 1st Avenue SE
- Hennepin Avenue
- Central Avenue
- Southbound I-35W Off-Ramp
- Northbound I-35W On-Ramp

The locations of these intersections were illustrated in FIGURE 21.1 with the project location. In addition to examining the p.m. peak hour traffic operations at these ten intersections, questions will be addressed regarding the potential need for traffic signal control at the intersection of University Avenue with 6th Avenue SE.

Traffic impacts are typically considered for the year following expected completion of development. Accordingly, traffic volumes and analyses will be established for the following three scenarios:

- 2003 Existing
- 2013 No-Build (Includes growth to background traffic and traffic associated with other anticipated development)
- 2013 Post-Development (Adds proposed development traffic to 2013 No-Build volumes)

FIGURE 21.3 illustrates the functional classification of important roadways in the vicinity of the development site. Existing signalized intersections are also illustrated in this figure. The University Avenue SE/4th Street SE one-way pair provides access between the development and I-35W and the University of Minnesota. 2nd Street SE also provides access to areas east of I-35W, avoiding traffic congestion at the interchange of University Avenue SE/4th Street SE with I-35W. There are two primary routes to/from downtown and the development. The first is provided by Main Street SE and its connection with Hennepin Avenue. 2nd Street SE provides convenient access between the development and downtown via Central Avenue.

Based on a review of the daily traffic volumes on major roadways in the vicinity of the development, traffic volumes in the area of the development are declining slightly or remaining relatively steady. To be conservative and to be consistent with other traffic studies performed in the City of Minneapolis, a 1% annual background growth factor will be used.

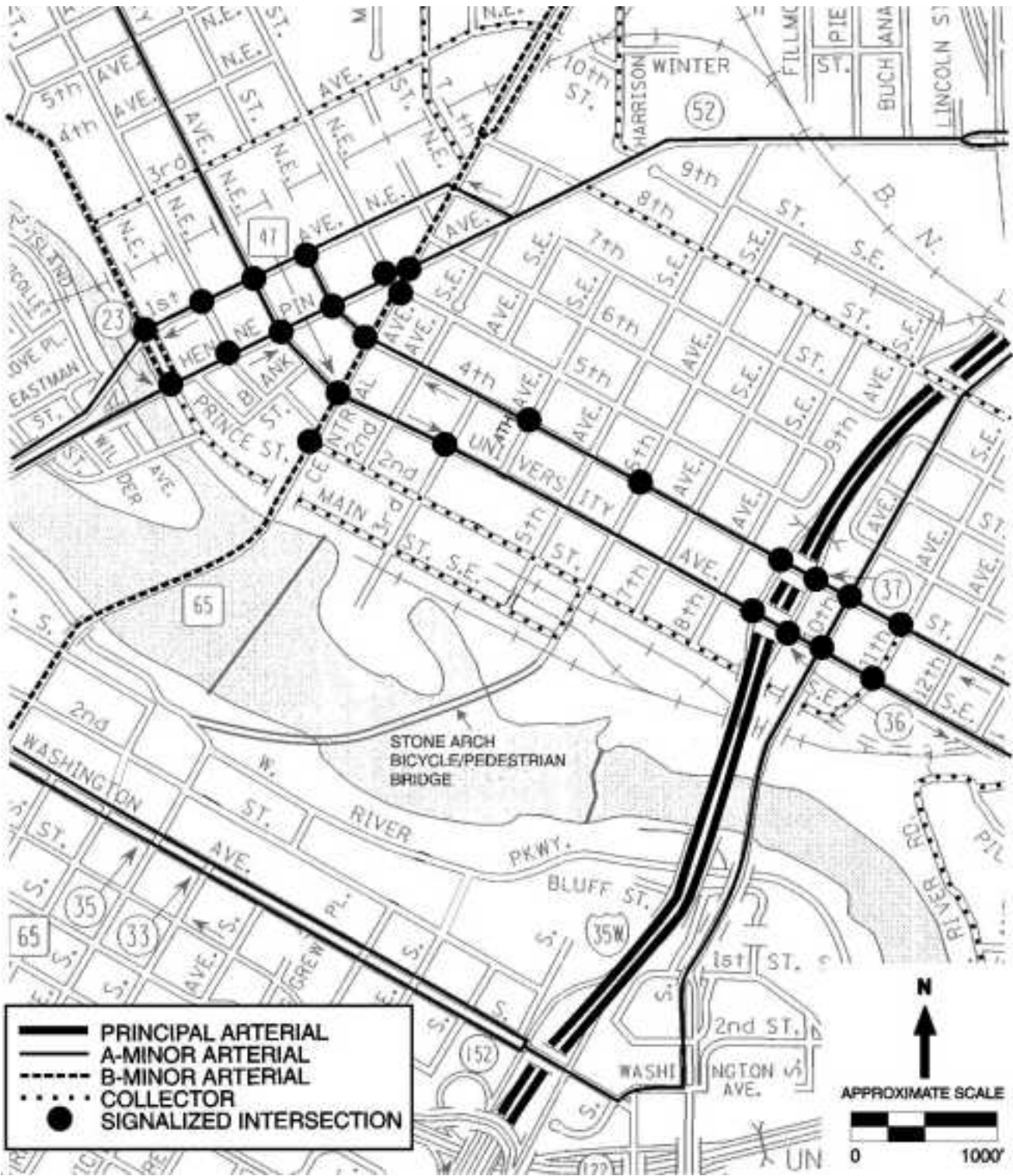
TRIP GENERATION

To establish trip generation rates for the residential components of the proposed development, peak hour driveway counts were recorded at the nearby La Rive and Winslow House developments. These developments are both less than three blocks from the proposed development site and, as we understand, have similar types of units and tenants as are expected at the proposed development.

The Winslow House has 56 dwelling units and the La Rive has 118, for a combined total of 174 dwelling units. In the a.m. peak hour, 35 trips were observed at both developments, yielding a trip generation rate of 0.201 trips per dwelling unit. In the p.m. peak hour, 62 total trips were observed at the two developments, yielding a trip generation rate of 0.356 trips per dwelling unit.

The two surveyed developments and the proposed development are most similar to the Institute of Transportation Engineers (ITE) land use classification of High-Rise Residential Condominium/Townhome. Trip generation rates published by ITE for this land use are 0.34 and 0.38 trips per dwelling unit in the a.m. and p.m. peak hours, respectively.

Given the close proximity to downtown Minneapolis and the extensive availability of transit, pedestrian, and bicycle amenities, it is not surprising that the actual trip generation rates for the LaRive and Winslow House developments are lower than the ITE data. Since the proposed residential development will be quite similar to the LaRive and Winslow House developments, the actual trip generation rates for those developments have been used for the new residential development.



Source: Benshoof & Associates, Inc.

<p>SchaferRichardson, Inc.</p>	<p>Pillsbury A Mill Complex (Minneapolis, Minnesota)</p>	<p>FIGURE 21.3</p>
<p>David Braslau Associates, Inc.</p>	<p>ENVIRONMENTALASSESSMENT WORKSHEET</p>	<p>Existing Functional Classification and Signalized Intersections</p>

Although the residential component of the proposed development is the most significant, the development plan also includes small retail components. For the retail components, trip generation rates observed at small neighborhood retail development in the Twin Cities was used. To account for the trips to and from the development by bus, walking, biking, or trips shared with other uses on the site, the gross trip generation of retail uses has been reduced by a factor of 20%.

Table 21.1 presents the PM peak hour trip generation forecast for the current development plan.

Table 21.1 PM Peak Hour Trip Generation for Pillsbury A Mill Redevelopment

Land Use	Size	Entering Rate	Exiting Rate	Entering Trips	Exiting Trips	Total
Residential	1,095 Dwelling Units	0.256	0.110	269	121	390
Retail	105,000 sq. ft.	2.56	2.46	269	258	527
			Total	538	379	917

Table 21.2 presents the trip generation projections for other developments that are included in the 2013 no-build scenario. Trip generation of the anticipated Diageo site was estimated using the same trip generation rates as those used for development on the A Mill site. The Diageo site, located at the SW corner of 3rd Avenue SE and 2nd Street SE, is a 38,115 square foot parcel that is being sold as a redevelopment site. It will not be developed as part of the A Mill project. Trip generation for the Stone Arch Apartments was obtained from the August 6, 2001 TDMP for that development. Trip generation for the SEMI redevelopment area was obtained from the May 2, 2000 SEMI/Bridal Veil AUAR. For the purpose of the 2013 traffic forecasts, we have assumed that 50% of the Mid-Intensity alternative would be completed by 2013.

Table 21.2 PM Peak Hour Trip Generation for Other Developments

Development / Land Use	Size	Entering Trips	Exiting Trips	Total
<i>Diageo Site</i>				
Residential	150 Dwelling Units	37	16	53
Retail	8,800 sq. ft.	23	22	45
<i>Stone Arch Apartments</i>				
Apartments	265 Units	68	43	111
<i>SEMI Redevelopment</i>				
Residential, Commercial, Industrial Uses		661	652	1313

TRIP DISTRIBUTION

The following items were considered when establishing the anticipated distribution of new trips for the proposed development:

- Functional classification of roadways and existing traffic volume levels.
- A sample survey conducted of the destinations of residents leaving the Winslow House development. This survey was completed on two separate mornings in June 2003
- Trip distribution projections from the Stone Arch Apartments TDMP.

FIGURE 21.4 illustrates the anticipated distribution of new trips for the Pillsbury A Mill site redevelopment.

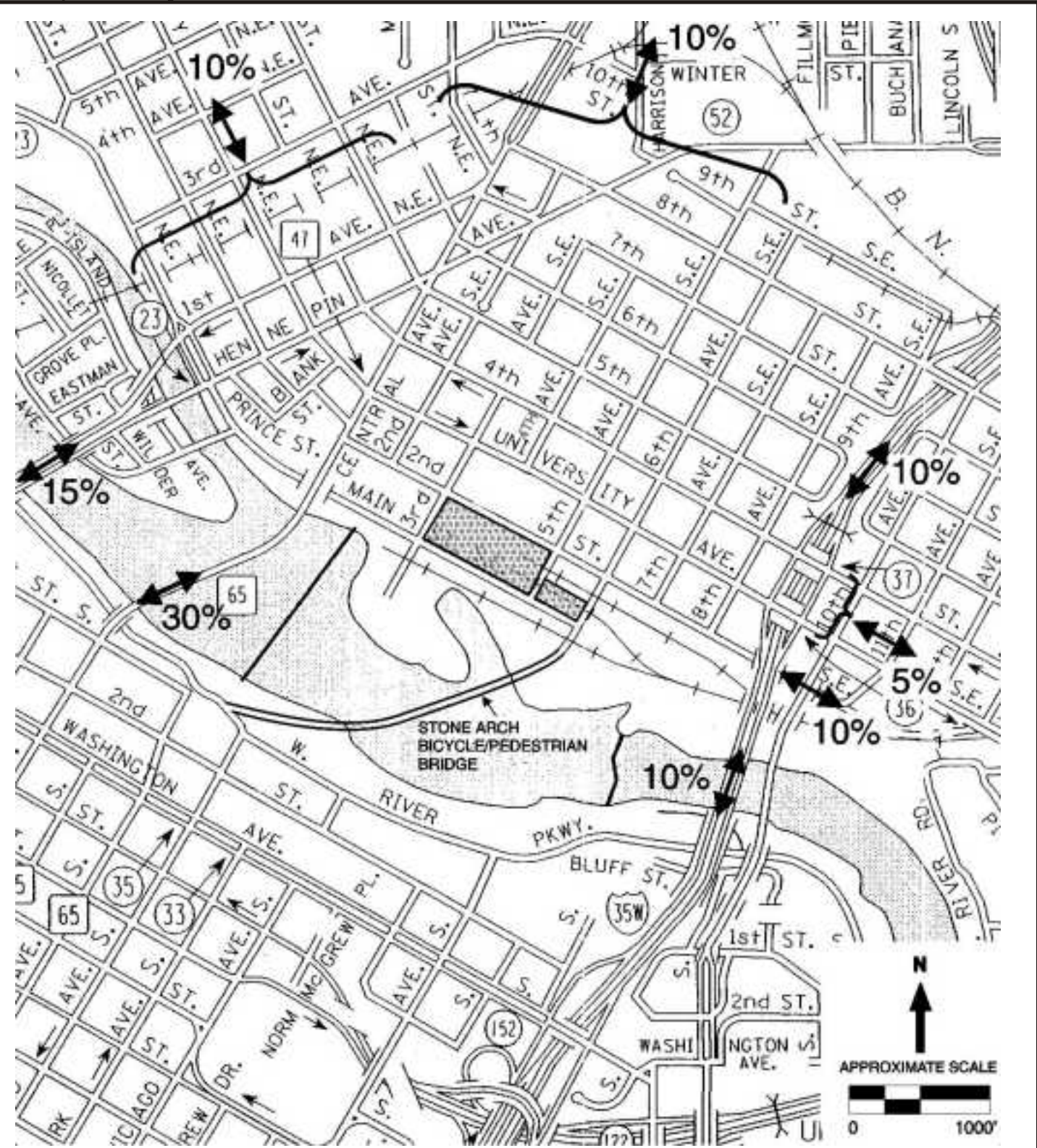
TRAFFIC FORECASTS

Existing traffic volumes were recorded all intersections in June 2003, except for the University Avenue SE and 4th Street SE intersections with the I-35W off-ramps. Counts at these two intersections were conducted in November 2003.

The following specific tasks were accomplished to establish the traffic volume projections:

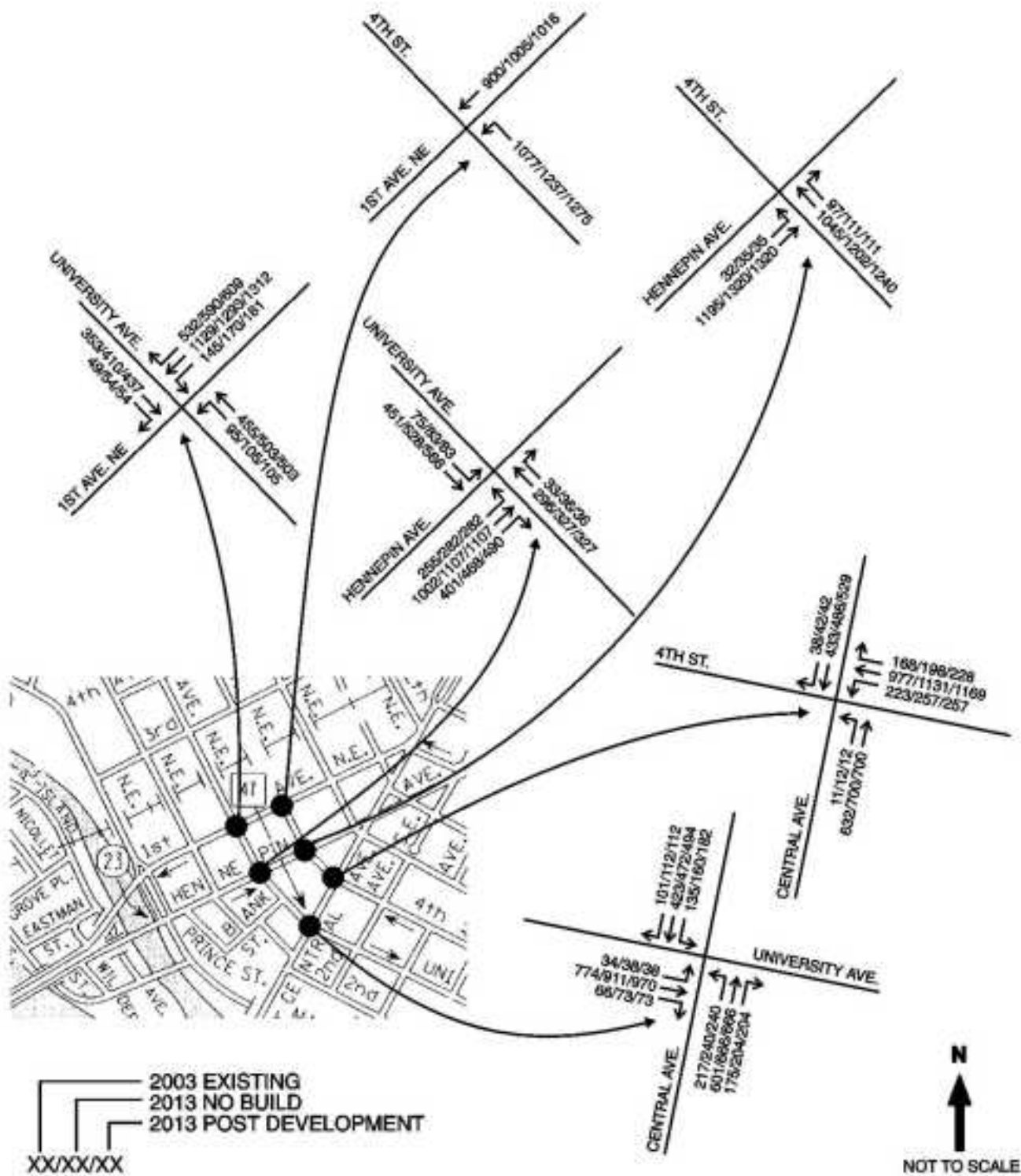
1. Turn movements counts at the I-35W ramp intersections from June were adjusted to balance with the November counts and account for normal activity levels at the University of Minnesota.
2. 2003 turning movements were increased to 2013 levels using a 1% annual background growth factor.
3. Traffic generated by other anticipated development was added to the roadway system.
 - Stone Arch Apartments
 - SEMI Redevelopment area
 - Diageo Site
4. Traffic generated by the proposed redevelopment were added to the roadway system. Parameters for trip generation forecasts and trip distribution forecasts were discussed in prior sections.

FIGURE 21.5 and FIGURE 21.6 presents the PM peak hour traffic volumes for each of the examined intersections.



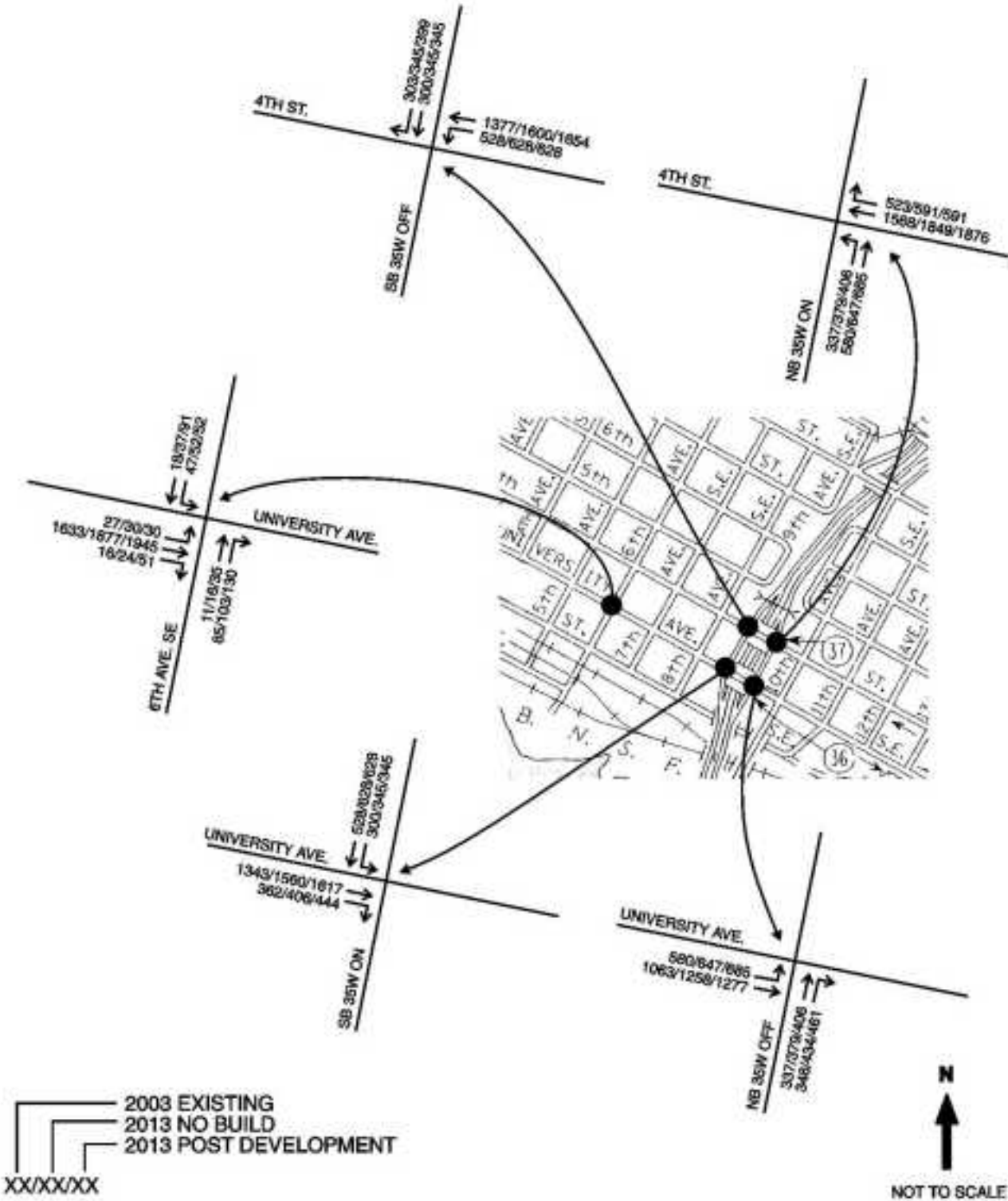
Source: Benshoof & Associates, Inc.

<p>SchaferRichardson, Inc.</p>	<p>Pillsbury A Mill Complex (Minneapolis, Minnesota)</p>	<p>FIGURE 21.4</p>
<p>David Braslau Associates, Inc.</p>	<p>ENVIRONMENTALASSESSMENT WORKSHEET</p>	<p>Distribution of New Trips</p>



Source: Benshoof & Associates, Inc.

<p>SchaferRichardson, Inc.</p> <hr/> <p>David Braslau Associates, Inc.</p>	<p>Pillsbury A Mill Complex (Minneapolis, Minnesota)</p> <p>ENVIRONMENTALASSESSMENT WORKSHEET</p>	<p>FIGURE 21.5</p> <p>PM Peak Hour Volumes Westerly Intersections</p>
--	---	---



Source: Benshoof & Associates, Inc.

SchaferRichardson, Inc.

David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)

ENVIRONMENTALASSESSMENT
WORKSHEET

FIGURE 21.6

PM Peak Hour Volumes
I-35W Intersections

INTERSECTION ANALYSES

In order to better understand how the intersections operate from an overall traffic capacity standpoint, capacity analyses were performed for each of the ten intersections using *Synchro* traffic analysis software using the 2003 existing, 2013 no-build, and 2013 post-development traffic volume forecasts. Capacity analysis results are presented in terms of level of service (LOS), which ranges from A to F. Level of service A represents the best intersection operation, with very little delay for each vehicle using the intersection. Level of service F represents the worst intersection operation, with excessive delay. The City of Minneapolis strives to achieve LOS D or better for operations of intersections during typical peak hours, while recognizing that major constraints may limit operations at a few intersections to LOS E.

The capacity analyses were completed using the existing intersection geometrics and existing traffic signal timing information provided by the City of Minneapolis. Table 21.3 presents a summary of the capacity analyses. For each of the examined intersections, the overall intersection level of service is presented for the existing, 2013 no-build, 2013 post-development scenarios. Following the table, the capacity analyses of each intersection are discussed in detail, including potential mitigation measures for intersections that experience capacity difficulties.

Table 21.3 Intersection Levels of Service

Intersection	2003 Existing	2013 No Build	2013 Post Development
1 st Avenue SE and 4 th Street SE	A	A	A
1 st Avenue SE and University Avenue SE	B	B	C
Hennepin Avenue and 4 th Street	E	F	F
Hennepin Avenue and University Ave. SE	B	B	B
Central Avenue and 4 th Street SE	B	C	D
Central Avenue and University Ave. SE	D	E	F
SB I-35W Ramps and 4 th Street SE	B	B	B
SB I-35W Ramps and University Ave. SE	B	C	C
NB I-35W Ramps and 4 th Street SE	D	E	E
NB I-35W Ramps and University Ave. SE	B	B	B

1st Avenue SE and 4th Street SE

1st Avenue is one-way in the southwest direction and 4th Street SE is one-way in the northwest direction. 4th Street SE forms a T-intersection with 1st Avenue SE. Three through lanes are provided on 1st Avenue SE and dual left turn lanes are provided from 4th Street SE. With limited traffic conflicts at this intersection due to the "T" design and the one-way streets, level of service A is expected to continue through the 2013 post-development scenario.

1st Avenue SE and University Avenue SE

1st Avenue SE provides one-way operation in the southwest-bound direction, with a left/through shared lane, one dedicated through lane, one shared through/right turn lane and one dedicated right turn lane. University Avenue SE provides two lanes in each direction. Level of service B operations are provided under the 2013 no-build scenario, and level of service C operations are

provided under the 2013 post-development scenario. Although the post-development scenario has one lower level of service grade, the resultant level of service C still is fully acceptable, and the total intersection delay increases less than two seconds from the 2013 no-build scenario.

Hennepin Avenue and 4th Street SE

Hennepin Avenue and 4th Street SE are both one-way roadways, and each provides three lanes in each direction. The left/through lane on Hennepin Avenue accommodates left turns to 4th Street SE, in addition to through traffic. Similarly, the right through lane on 4th Street SE accommodates right turns to Hennepin Avenue. The intersection of Hennepin Avenue and 4th Street SE currently operates at LOS E. Additional traffic added to the intersection under the 2013 no-build and post-development scenarios would cause the level of service to drop to LOS F.

Minor adjustments to the traffic signal timing would allow this intersection to operate at LOS E under the 2013 post-development scenario. Specifically, shifting 4 seconds of time from Hennepin Avenue to 4th Street SE would be required. One potential option to further improve level of service at this intersection would be the addition of a dedicated right turn lane on 4th Street SE. This lane could likely be provided through removal of on-street parking. Consideration regarding the locations of bus stops at this intersection should be given prior to implementing such a measure. If the dedicated right turn lane were added, the intersection would operate at LOS D under the 2013 post-development scenario.

Hennepin Avenue and University Avenue SE

University Avenue SE provides two lanes in each direction. Hennepin Avenue operates one-way in the northeast-bound direction and provides three lanes. Level of service B operations are expected through the 2013 post-development scenario.

Central Avenue and 4th Street SE

Central Avenue provides two lanes in each direction. 4th Street SE operates one-way in the westbound direction and provides three lanes.

Level of service B operations currently are provided at this intersection. Under the 2013 no-build and post-development scenarios, level of service C and D operations are expected, respectively. The average intersection delay increases by about seven seconds between the 2013 no-build and post-development.

Central Avenue and University Avenue

At the intersection with University Avenue SE, each approach of Central Avenue provides one right turn lane, one through lane, and one shared through/left turn lane. University Avenue SE provides two lanes in each direction west of Central Avenue and three lanes in the eastbound direction east of Central Avenue, where it is a one-way roadway. This intersection currently operates at LOS D in the p.m. peak hour. Due to increases in background traffic, this intersection is expected to operate at LOS E in the 2013 no-build PM peak hour. Although the Pillsbury A Mill Redevelopment only adds about 100 cars (3.5%) to the total intersection volume, the level of service under the 2013 post-development scenario is expected to be at F. The average intersection delay increase by about seven seconds between the no-build and post-development scenarios of the 2013 PM peak hour.

Level of service E operations could be achieved under the 2013 post-development scenario by adjusting the traffic signal timing to shift 3 seconds of each cycle from University Avenue SE to Central Avenue and by decreasing the lead for southbound Central Avenue from 14 seconds to 10 seconds.

One potential option that exists to improve the operations of the Central Avenue and University Avenue SE intersection to LOS D operations would be to add a dedicated right turn lane to the eastbound approach. This lane could be added by removing existing on-street parking along part of the block. By adding a dedicated right turn lane, through traffic on University Avenue SE would not be impeded by right turning traffic, especially when the right turn movement is blocked by pedestrians in the crosswalks.

SB I-35W Ramps and 4th Street SE

4th Street SE provides two dedicated westbound through lanes and a shared through/left turn lane. The off-ramp from southbound I-35W provides one through lane, one through/right turn shared lane, and one exclusive right turn lane. Level of service B operations are expected during the PM peak hour at this intersection through the 2013 post-development scenario.

SB I-35W Ramps and University Avenue SE

University Avenue SE operates one-way and provides three eastbound lanes. The southbound approach provides one through lane, one shared through/left turn lane, and one dedicated left turn lane. Level of service B operations are currently experienced in the PM peak hour. Under the 2013 no-build and post-development scenarios, level of service C operations are expected in the PM peak hour.

NB I-35W Ramps and 4th Street SE

The intersection of 4th Street SE with the northbound I-35W ramp is the critical intersection of the interchange in the PM peak hour. Currently, this intersection operates at LOS D in the PM peak hour. Due to traffic growth associated with the SEMI redevelopment and general background traffic growth, this intersection is expected to operate at LOS E in the 2013 no-build PM peak hour. Level of service E operations will continue under the 2013 post-development scenario..

Level of service D operations could be achieved through slight modifications in traffic signal timing, namely to shift five seconds of green time from the northbound approach to the westbound approach.

NB I-35W Ramps and University Avenue

The off-ramp from northbound I-35W provides two northbound through lanes and dual northbound right turn lanes. University Avenue SE provides two dedicated eastbound through lanes and one shared through/left turn lane. Level of service B operations are anticipated under each of the scenarios through 2013.

SIGNAL WARRANT ANALYSIS FOR 6TH AVENUE AND UNIVERSITY AVENUE INTERSECTION

Questions have been raised regarding the need for traffic signal control at the intersection of 6th Avenue SE with University Avenue SE. The peak hour warrant for traffic signal control has been evaluated using the p.m. peak hour traffic forecasts that have been prepared for the intersection of University Avenue SE and 6th Avenue SE. The peak hour warrant is satisfied when the approach volume of the minor street approach and the approach volume on the major street approach exceed certain threshold levels. For a major street with a volume of 1600 vehicles per hour or greater, the minimum total minor street volume of one approach must exceed 100 vehicles per hour. The approach volumes at this intersection are presented in Table 21.4.

Table 21.4 Approach Volumes at University Avenue and 6th Avenue SE Intersection

Scenario	University Avenue SE Approach	Southbound 6 th Avenue SE Approach			Northbound 6 th Avenue SE Approach		
		Through	Left	Total	Through	Right	Total
2003 Existing	1633	18	47	65	11	85	96
2013 No Build	1877	37	52	89	16	103	119
2013 Post Dev	1945	91	52	143	35	130	165

As indicated in Table 21.4, the minimum threshold total approach volume is not exceeded with the existing traffic volumes. Under the 2013, no-build scenario, the northbound approach volume exceeds 100 vehicles per hour; however, it is composed mostly of right turning traffic. Although the criteria of the warrant are technically met under the 2013 no-build scenario, traffic signal control would probably not be justified considering that right turn movements can occur easily without the benefit of traffic signal control.

Under the 2013 post-development scenario, both the north and south approaches exceed the 100 vehicle per hour threshold. This is a good indication that other signal warrants would be met and that traffic signal control would be justified. Traffic operations at the University Avenue SE intersection with 6th Avenue SE should be monitored and traffic signal control should be considered if traffic operation difficulties develop and a traffic signal warrant analysis based on the traffic volumes at that time indicate that signal control is warranted and justified.

22. VEHICLE-RELATED AIR EMISSIONS

Estimate the effect of the project's traffic generation on air quality, including carbon monoxide levels. Discuss the effect of traffic improvements or other mitigation measures on air quality impacts. Note: If the project involves 500 or more parking spaces, consult *EAW Guidelines* about whether a detailed air quality analysis is needed.

Motor vehicle emissions are associated with vehicles traveling to and from the Pillsbury A Mill development along access roadways and through critical intersections. The most critical pollutant associated with vehicular traffic in Minnesota is Carbon Monoxide (CO) for which 1-hour and 8-hour ambient air quality standards have been established by the US Environmental Protection

Agency (EPA) and the Minnesota Pollution Control Agency (MPCA). The MPCA 1-hour standard (30 ppm) is slightly more stringent than the EPA 1-hour standard (35 ppm) and will therefore be used in this assessment. The standards are presented in Table 22.1.

Table 22.1 MPCA Ambient Air Quality Standards for Carbon Monoxide

Period	Standard
1-hour	30 ppm
8-hour	9 ppm

A microscale analysis (predicting Carbon Monoxide concentrations adjacent to intersections) has been made for ten at-grade intersections which carry a major portion of access traffic. All of these intersections currently carry substantial volumes of traffic. For purposes analysis, traffic along 4th Street SE and University Avenue SE was assumed to run east and west, while traffic along 1st Avenue SE, Hennepin Avenue, and Central Avenue was assumed to run north and south. PM Peak Hour approach volumes are shown in Table 22.2.

Table 22.2 Intersections Analyzed For Carbon Monoxide

East/West	North/South	No Build (2013)		Build (2013)	
		App Vol	LOS	App Vol	LOS
4 th Street SE	1 st Avenue SE	2242	A	2291	A
4 th Street SE	Hennepin Avenue	2668	F	2706	F
4 th Street SE	Central Avenue	2826	C	2937	D
4 th Street SE	I-35W SB Frontage	2918	B	3026	B
4 th Street SE	I-35W NB Frontage	3466	E	3558	F
University Ave. SE	1 st Avenue SE	3125	B	3201	C
University Ave. SE	Hennepin Avenue	2831	B	2891	B
University Ave. SE	Central Avenue	2876	E	2979	F
University Ave. SE	I-35W SB Frontage	2939	C	3034	C
University Ave. SE	I-35W NB Frontage	2718	B	2829	B

The CAL3QHC dispersion model was used to estimate CO concentrations at receptor sites near these intersections. For the four intersections at I-35W, all four intersections including the contribution of traffic on a depressed I-35W were analyzed together. Buildings or parks closest to these intersections were included as receptor sites in the dispersion model. These are shown in FIGURE 22.1 for the westerly three intersections and in FIGURE 22.2 for the four easterly intersections near I-35W.



SchaferRichardson, Inc.

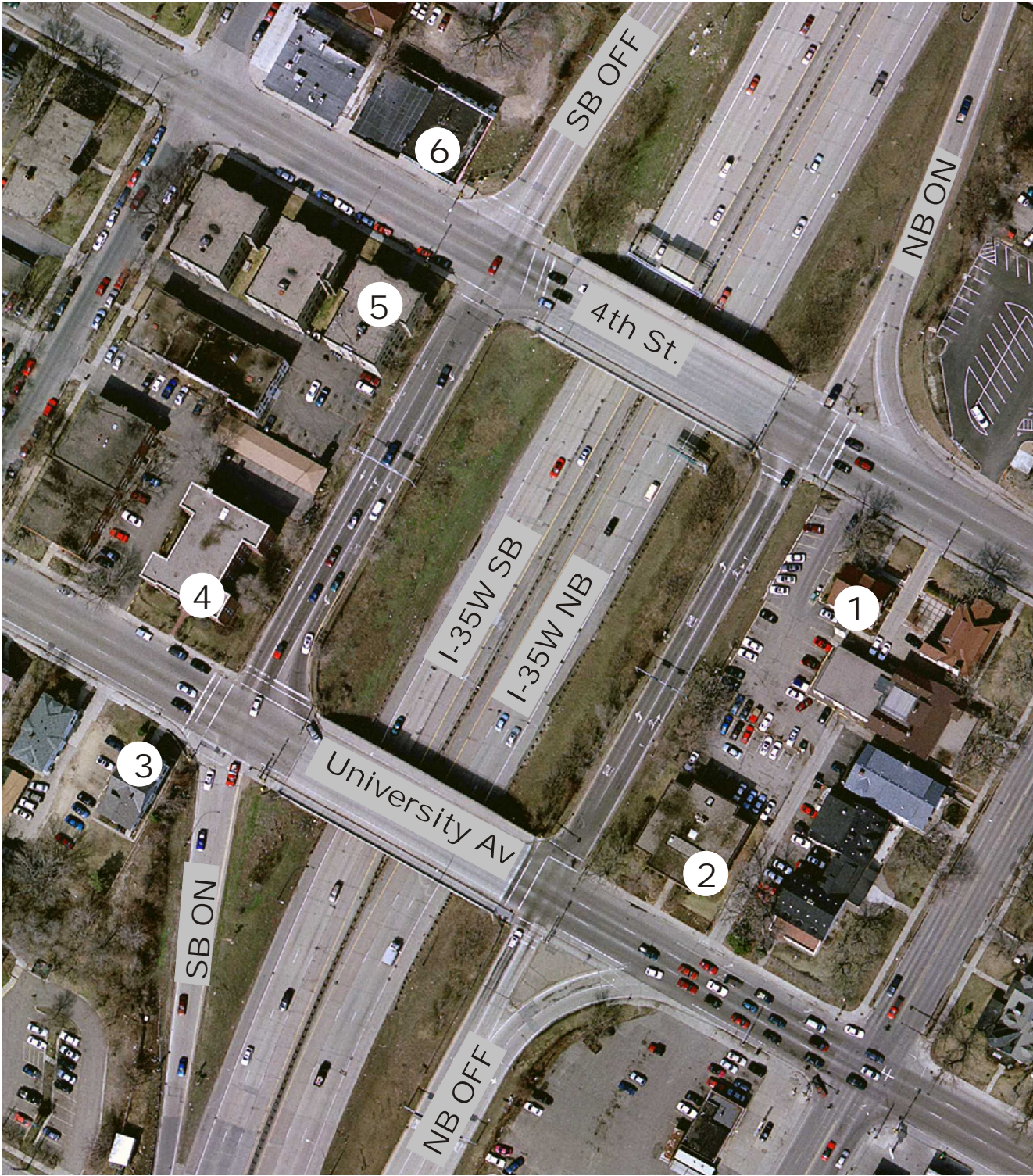
David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)

ENVIRONMENTALASSESSMENT
WORKSHEET

FIGURE 22.1

Receptor Sites for Westerly Intersections



SchaferRichardson, Inc.

David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)

ENVIRONMENTALASSESSMENT
WORKSHEET

FIGURE 22.2

Receptor Sites
at I-35W, 4th St.
and University Avenue

Background CO was determined from 2002 and 2003 data from the MPCA continuous monitor at 5th Street and Hennepin Avenue in Downtown Minneapolis. The maximum 1-hour and 8-hour background concentrations were highest during the PM Peak Hour during an episode that occurred between February 8 and 9, 2002. These maximum concentrations and adjusted values to the 2013 projection year are shown in Table 22.3. These were then adjusted assuming an average speed of 20 mph and annual growth in VMT of 1.5% to the year 2013.

Table 22.3 CO Background Concentrations (PPM)

	2002	2013
Emissions	1.00	0.94
VMT growth	1.00	1.18
Combined	1.00	1.11
1-hour	2.6	2.9
8-hour	1.9	2.1

The air quality analysis is based upon PM peak hour traffic projections developed in Question 21 for the 2013 No Build and Build scenarios.

The U.S. EPA MOBILE 5A emissions model for 2013 was run with the vehicle mix developed by the MPCA for the Twin Cities Metropolitan Area to yield idle emissions during vehicle queuing and free flow emissions, assuming an average approach speed of 25 mph. The CAL3QHC model has been used to estimate downwind concentrations of carbon monoxide at receptor sites adjacent to each critical intersection. 8-hour concentrations associated with each roadway are estimated using a persistence factor of 0.70 applied to the PM peak hour emissions.

Predicted maximum 1-hour Carbon Monoxide concentrations at intersections and receptor sites are presented in Table 22.4 through Table 22.6. Predicted maximum 8-hour concentrations are shown in TABLE 22.7 through Table 22.9.

Table 22.4 1-Hour CO Concentrations (ppm) on 4th Avenue SE for Westerly Intersections

	2013 No Build			2013 Build		
	Roadway	Background	TOTAL	Roadway	Background	TOTAL
1st Ave at 4th SE						
Rec 1 NE	1.4	2.9	4.3	1.4	2.9	4.3
Rec 2 SE	1.4	2.9	4.3	1.5	2.9	4.4
Rec 3 SW	1.4	2.9	4.3	1.4	2.9	4.3
Rec4 NW	0.9	2.9	3.8	1.0	2.9	3.9
Henn Ave at 4th SE						
Rec 1 NE	2.3	2.9	5.2	2.3	2.9	5.2
Rec 2 SE	3.3	2.9	6.2	3.3	2.9	6.2
Rec 3 SW	2.3	2.9	5.2	2.3	2.9	5.2
Rec 4 NW	2.1	2.9	5.0	2.1	2.9	5.0
Cen Ave at 4th SE						
Rec 1 NE	2.2	2.9	5.1	2.4	2.9	5.3
Rec 2 SE	3.0	2.9	5.9	3.2	2.9	6.1
Rec 3 SW	1.5	2.9	4.4	1.7	2.9	4.6
Rec 4 NW	3.7	2.9	6.6	3.9	2.9	6.8
MPCA STANDARD			30.0			30.0

Table 22.5 1-Hour CO Concentrations (ppm) on University Ave. SE for Westerly Intersections

	2013 No Build			2013 Build		
	Roadway	Background	TOTAL	Roadway	Background	TOTAL
1st Ave at Univ SE						
Rec 1 NE	1.7	2.9	4.6	1.8	2.9	4.7
Rec 2 SE	1.9	2.9	4.8	1.9	2.9	4.8
Rec 3 SW	1.7	2.9	4.6	1.7	2.9	4.6
Rec 4 NW	1.8	2.9	4.7	1.8	2.9	4.7
Henn Ave at Univ SE						
Receptor 1 NE	2.5	2.9	5.4	2.5	2.9	5.4
Rec 1 NE	2.4	2.9	5.3	2.4	2.9	5.3
Rec 2 SE	1.6	2.9	4.5	1.6	2.9	4.5
Rec 3 SW	1.0	2.9	3.9	1.0	2.9	3.9
Cen Ave at Univ SE						
Rec 1 NE	2.2	2.9	5.1	2.2	2.9	5.1
Rec 2 SE	2.1	2.9	5.0	2.2	2.9	5.1
Rec 3 SW	2.1	2.9	5.0	2.1	2.9	5.0
Rec 4 NW	1.4	2.9	4.3	1.4	2.9	4.3
MPCA STANDARD			30.0			30.0

Table 22.6 1 Hour CO Concentrations (ppm) at I-35W, 4th St. and University Avenue

	2013 No Build			2013 Build		
	Roadway	Background	TOTAL	Roadway	Background	TOTAL
I-35W Intersections						
Rec 1	2.8	2.9	5.7	2.9	2.9	5.8
Rec 2	3.1	2.9	6.0	3.1	2.9	6.0
Rec 3	3.6	2.9	6.5	3.7	2.9	6.6
Rec 4	4.4	2.9	7.3	4.4	2.9	7.3
Rec 5	3.2	3.9	7.1	3.3	3.9	7.2
Rec 6	4.6	4.9	9.5	4.7	4.9	9.6
MPCA STANDARD			30.0			30.0

From the above tables, it can be seen that the maximum predicted CO concentrations are well below the 1-hour 30 ppm standard. The highest predicted 1-hour CO concentration is 9.6 ppm at Receptor 6 in the northwest corner of 4th Street SE and the I-35W Southbound Off-Ramp intersection. Because of the heavy existing volumes at all of these intersections, the impact of the project on air quality is small. The maximum expected increase in 1-hour concentration is 0.2 ppm which is expected in all quadrants of the 4th Street SE and Central Avenue intersection.

Table 22.7 8-Hour CO Concentrations (ppm) on 4th Street SE for Westerly Intersections

	2013 No Build			2013 Build		
	Roadway	Background	TOTAL	Roadway	Background	TOTAL
1st Ave at 4th SE						
Rec 1 NE	1.0	2.1	3.1	1.0	2.1	3.1
Rec2 SE	1.0	2.1	3.1	1.1	2.1	3.2
Rec 3 SW	1.0	2.1	3.1	1.0	2.1	3.1
Rec4 NW	0.6	2.1	2.7	0.7	2.1	2.8
Henn Ave at 4th SE						
Rec 1 NE	1.6	2.1	3.7	1.6	2.1	3.7
Rec 2 SE	2.3	2.1	4.4	2.3	2.1	4.4
Rec 3 SW	1.6	2.1	3.7	1.6	2.1	3.7
Rec 4 NW	1.5	2.1	3.6	1.5	2.1	3.6
Cen Ave at 4th SE						
Rec 1 NE	1.5	2.1	3.6	1.7	2.1	3.8
Rec 2 SE	2.1	2.1	4.2	2.2	2.1	4.3
Rec 3 SW	1.1	2.1	3.2	1.2	2.1	3.3
Rec 4 NW	2.6	2.1	4.7	2.7	2.1	4.8
MPCA STANDARD			9.0			9.0

Table 22.8 8-Hour CO Concentrations (ppm) on University Ave. SE at Westerly Intersections

	2013 No Build			2013 Build		
	Roadway	Background	TOTAL	Roadway	Background	TOTAL
1st Ave at Univ SE						
Rec 1 NE	1.2	2.1	3.3	1.3	2.1	3.4
Rec 2 SE	1.3	2.1	3.4	1.3	2.1	3.4
Rec 3 SW	1.2	2.1	3.3	1.2	2.1	3.3
Rec 4 NW	1.3	2.1	3.4	1.3	2.1	3.4
Henn Ave at Univ SE						
Receptor 1 NE	1.8	2.1	3.9	1.8	2.1	3.9
Rec 1 NE	1.7	2.1	3.8	1.7	2.1	3.8
Rec 2 SE	1.1	2.1	3.2	1.1	2.1	3.2
Rec 3 SW	0.7	2.1	2.8	0.7	2.1	2.8
Cen Ave at Univ SE						
Rec 1 NE	1.5	2.1	3.6	1.5	2.1	3.6
Rec 2 SE	1.5	2.1	3.6	1.5	2.1	3.6
Rec 3 SW	1.5	2.1	3.6	1.5	2.1	3.6
Rec 4 NW	1.0	2.1	3.1	1.0	2.1	3.1
MPCA STANDARD			9.0			9.0

Table 22.9 8-Hour CO Concentrations (ppm) at I-35W, 4th St. SE and University Avenue SE

	2013 No Build			2013 Build		
	Roadway	Background	TOTAL	Roadway	Background	TOTAL
I-35W Intersections						
Rec 1	2.0	2.1	4.1	2.0	2.1	4.1
Rec 2	2.2	2.1	4.3	2.2	2.1	4.3
Rec 3	2.5	2.1	4.6	2.6	2.1	4.7
Rec 4	3.1	2.1	5.2	3.1	2.1	5.2
Rec 5	2.2	2.1	4.3	2.3	2.1	4.4
Rec 6	3.2	2.1	5.3	3.3	2.1	5.4
MPCA STANDARD			9.0			9.0

From the above tables, it can be seen that the predicted 8-hour CO concentration will be below the 8-hour standard of 9 ppm. The maximum impact of the project on 8-hour concentrations is predicted to be only 0.1 ppm, with most of the receptor sites experiencing increase of less than this amount.

Based upon the CO emission and dispersion analysis at these four intersections, it can be seen that the predicted 1-hour and 8-hour concentrations all fall below the established ambient air quality standards for Carbon Monoxide. Therefore, no significant adverse air quality impacts are expected because of the development.

23. STATIONARY SOURCE AIR EMISSIONS

Describe the type, sources, quantities and compositions of any emissions from stationary sources of air emissions such as boilers, exhaust stacks or fugitive dust sources. Include any hazardous air pollutants (consult *EAW Guidelines* for a listing) and any greenhouse gases (such as carbon dioxide, methane, nitrous oxide) and ozone-depleting chemicals (chloro-fluorocarbons, hydro fluorocarbons, per fluorocarbons or sulfur hexafluoride). Also describe any proposed pollution prevention techniques and proposed air pollution control devices. Describe the impacts on air quality.

Emergency generators will be installed in each of the buildings equipped with elevators. Up to 12 generators may be required with a range of power requirements. Each generator will require a registration permit from the Minnesota Pollution Control Agency in which emission estimates will be included. Because of limited and periodic use, no significant adverse impacts on air quality are anticipated from this equipment.

24. ODORS, NOISE AND DUST

Will the project generate odors, noise or dust during construction or during operation? ■ Yes □ No

If yes, describe sources, characteristics, duration, quantities or intensity and any proposed measures to mitigate adverse impacts. Also identify locations of nearby sensitive receptors and estimate impacts on them. Discuss potential impacts on human health or quality of life. (Note: fugitive dust generated by operations may be discussed at item 23 instead of here.)

Dust and noise may be associated with demolition, grading of the site and construction of the buildings, driveways, parking areas. Noise may also be associated with mechanical equipment and traffic accessing the site. Noise generated by the project must comply with the Minnesota noise standards, which are presented in Table 24.1. L10 is the level exceeded for 10% or six minutes of an hour. L50 is the level exceeded for 50% or 30 minutes of an hour.

Table 24.1 Minnesota Noise Standards

Land Use	Daytime (7 am to 10 pm)		Nighttime (10 pm to 7 am)	
	L10 (dBA)	L50 (dBA)	L10 (dBA)	L50 (dBA)
NAC-1 (residential)	65	60	55	50
NAC-2 (commercial)	70	65	70	65
NAC-3 (industrial)	80	75	80	75

Demolition of the Grain Elevators and Annex

The approval process for demolition of the grain elevator and annex is discussed in Question 27 of the EAW. This section addresses potential noise and air quality impacts from demolition and measures that can be taken to minimize these impacts.

The elevator has been estimated to have about 25,000 tons of recyclable concrete. It is anticipated that demolition will begin initially with cranes and eventually change over to surface equipment. Dust control will be required throughout the process. There are several options of processing the reinforced concrete taken from the elevators.

- Place the primary crusher on site and reduce the material to 3" minus (i.e. material that is 3" or less in size)

- Add secondary crushers for finer material, involving more equipment, screens, washing and motors, a more costly on-site process, but increases immediate salability of processed material.
- Haul larger blocks of the material away for primary crushing

The most cost-effective option may be primary crushing on site which can separate the material and minimize the number of trucks needed to haul the material. The finer material will also be more saleable. The primary crusher will be capable of handling concrete and re-bar. The re-bar is picked out with a magnet and sent to a pile different from the concrete.

There are also several options for placing the equipment to minimize noise and vibration impact on the General Mills Research Facility which is across 2nd Street SE from the elevator:

- Large parking lot west of the elevators
- Open areas south and east of the elevators

Based upon previous sound level readings of typical rock crushers which may be slightly noisier than the concrete crusher, the crusher would have to be 300 feet from the nearest industrial land use or 1000 feet from the nearest commercial land use, assuming no shielding of the equipment, to comply with daytime state noise standards. Therefore, if the equipment cannot be effectively placed to take advantage of shielding by structures on the site, a temporary sound barrier will likely be needed to mitigate sound levels.

It is estimated that demolition, processing and hauling would take from 4 to 6 weeks. Trucks can haul 15 tons, but if the material is not reduced, it may take twice as many trucks to haul the same tonnage of material. Assuming 25,000 tons and 15 tons per truck, 1666 truckloads will be required. Assuming 10 hour days, 5 days per week (50 hours) and four weeks to complete the job (200 hours), that would require about 8 trucks per hour outbound and 8 trucks per hour inbound. The route used for truck hauling will be determined by the contractor and the ultimate destination of materials. However, trucks hauling recycled material are expected to follow the route currently used by heavy trucks on 2nd Street SE. Noise along these routes will increase less than 1 dBA because of the small impact of the additional number of hauling trucks compared with the volume of trucks already on these routes.

Because of the potential for ground vibration from demolition and crushing, it is recommended that ground vibration be monitored during the demolition process at adjacent land uses. This is standard practice used by major demolition contractors. If the potential for vibration-sensitive activities with the adjacent General Mills Research Center is identified during the demolition process, ground vibration will be monitored and modifications made to the process, time of processing, or location to ensure that vibration limits for these activities will not be exceeded.

Construction

The following measures to minimize noise and dust emissions will be incorporated into construction procedures and operation of the project:

- All internal combustion motors will be fitted with mufflers and other noise control equipment as specified by the manufacturer.
- Minnesota Rules 7005.0050 on the control of fugitive particulate matter from construction and hauling activities will be followed as to minimize adverse air quality impacts.

- Mechanical equipment associated with the development will be installed and operated so as to comply with the Minnesota standards.

Traffic Noise

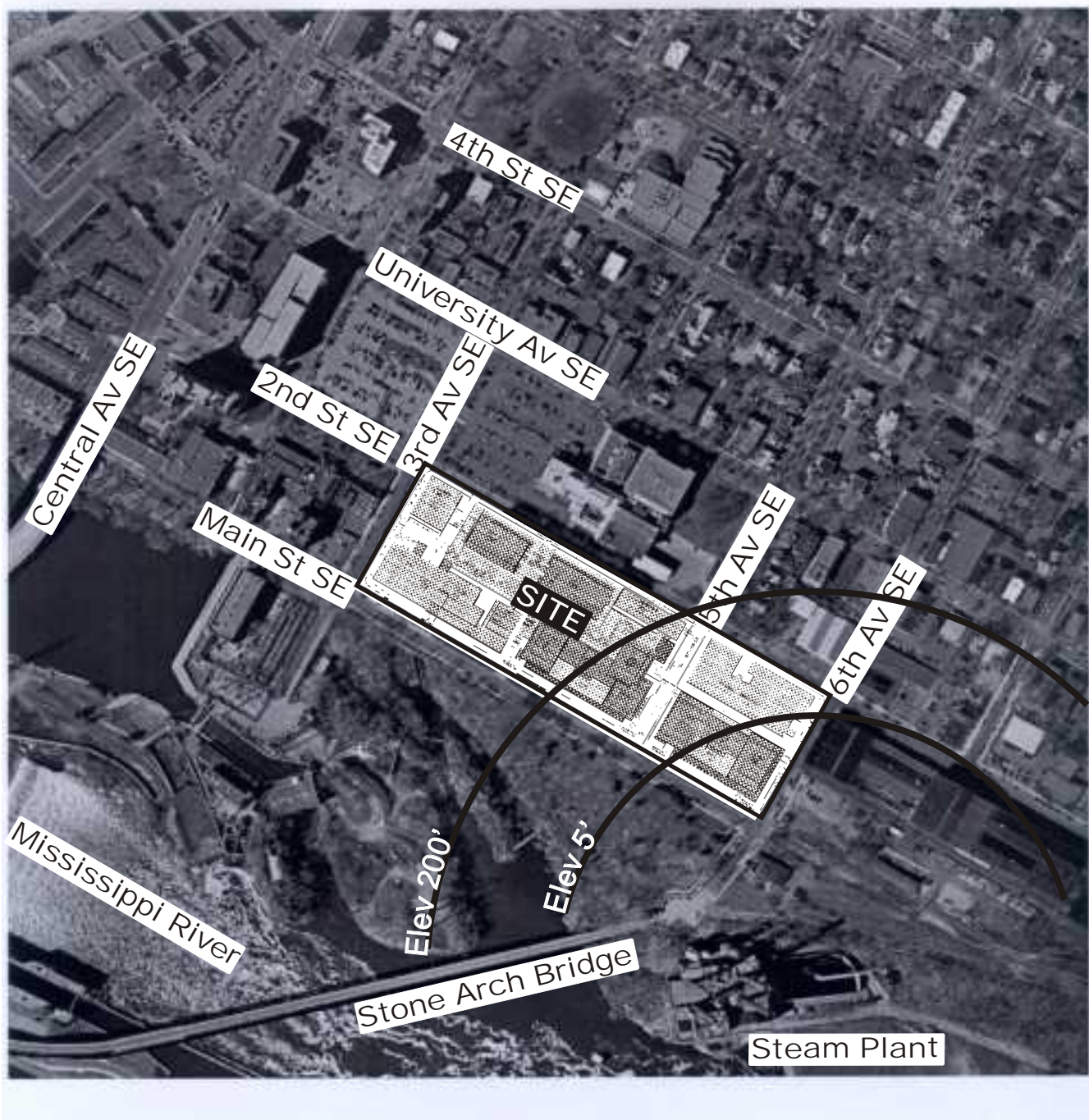
Traffic on University Avenue SE and 4th Street SE is projected to increase a maximum of 4% due to the proposed development. Assuming that the vehicle mix and speed remain the same, the theoretical increase in noise level associated with this increase in traffic is 0.2 dBA. This is well below the increase of 3 dBA that is associated with a detectable increase in traffic noise. Therefore, no adverse noise impacts from traffic noise are expected following project completion.

As noted above, a maximum of 16 trucks per hour are expected during the demolition phase of the project. Assuming that only 20 trucks and 1000 automobiles per hour will travel along a roadway, the additional 16 heavy trucks are expected to increase the sound level by 1 dBA which is below the increase of 3 dBA that is associated with an increase in traffic noise level. Truck traffic during construction will be less with a correspondingly smaller increase in noise level. Therefore, no adverse noise impacts are expected during the demolition or construction phase of the project.

Potential Noise Impacts from the University of Minnesota Steam Plant

Sound level readings have been taken previously at a number of locations in the vicinity of the University Steam Plant including the adjacent park, residential and industrial areas. Previously, noise from the ADM processing facility on the proposed development site contributed the highest noise level in Father Hennepin Bluff Park. The sound level data were analyzed and used to establish the noise level associated with the Steam Plant alone. Assuming that the primary source of noise associated with the Steam Plant are the tall stacks (approximately 140 feet above ground level), noise levels have been projected at the southeast corner of Parcel G which is the closest point to the Steam Plant. Because of stack directivity, noise levels at the project will increase with height above the stack. A simple 60 dBA contour around the steam plant stacks has been estimated for a receptor 5' above the ground and at an elevation 200 feet above the ground. These contours are shown on FIGURE 24.1.

Estimated levels at the residential tower are 62 dBA on the first floor and from 65 dBA at 180 feet to 67 dBA on the top floor (200 feet). The Residential (noise area classification 1) nighttime L50 standard of 50 dBA is applicable for continuous sound sources such as the Steam Plant stacks. Under the exceptions to the noise rules (shown below), all of the floors below 180 feet will require an exterior-to-interior noise reduction of at least 30 dBA while floors between 180 and 200 feet will require an exterior-to-interior noise reduction of 40 dBA. It should be noted that balconies which may periodically be used after 10:00 pm are not considered "accommodations intended for outdoor activities". Typical new high-rise construction should provide at least a 30 dBA noise reduction, although improved glazing will likely be needed for the upper floors of buildings within the 60 dBA contour shown in FIGURE 24.1.



SchaferRichardson, Inc.

David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)

ENVIRONMENTALASSESSMENT
WORKSHEET

FIGURE 24.1

Noise Contours from Steam Plant

Applicable exceptions to the Minnesota noise rules are listed below.

7030.0050 Subp. 3. Exceptions. The noise area classification for a land use may be changed in the following ways if the applicable conditions are met.

- B.** The standards for a building in a noise area classification 2 [L50 65 dBA] shall be applied to a building in a noise area classification 1 if the following conditions are met:

 - (1) the building is constructed in such a way that the exterior to interior sound level attenuation is at least 30 dB(A);
 - (2) the building has year-round climate control; and
 - (3) the building has no areas or accommodations that are intended for outdoor activities.
- C.** The standards for a building in a noise area classification 3 [L50 75 dBA] shall be applied to a building in a noise area classification 1 if the following conditions are met:

 - (1) the building is constructed in such a way that the exterior to interior sound level attenuation is at least 40 dB(A);
 - (2) the building has year-round climate control; and
 - (3) the building has no areas or accommodations that are intended for outdoor activities.

Potential Impact of Stack Emissions from the University of Minnesota Steam Plant

In addition to the noise generated at the Steam Plant stack, for buildings 15 stories and higher that are approved for construction, the potential impacts of stack emissions under certain meteorological conditions should be evaluated based upon final building designs. Preliminary estimation of concentrations can be made with theoretical dispersion models to determine whether or not there is any potential for impact. Should the results of such an analysis indicate the potential for impact, it may be necessary to perform wind tunnel studies of individual buildings or groups of buildings as the development proceeds. Such studies are commonly performed for structural design, pedestrian wind analysis, and pollutant dispersion analysis and measures can be taken in building design to minimize potential impacts. For example, fresh air intakes can be placed at locations least likely to be impacted by emissions from the plant. Elevations located closer to ground level that are removed from garage exhausts or located at higher elevations well above or well below the stack height (approximately 15 stories) may be appropriate, although this will depend upon final building design and the location and design of surrounding buildings. This level of design detail will require a careful analysis or a wind tunnel test of the final design of the buildings in question, if it is determined that this impact could be significant.

Noise Impacts from the General Mills Research Facility

Rooftop cooling towers, condensers and fans are located on the roof of the Research Facility which is located across 2nd Street SE from the proposed parcels B, C and the remodeled Warehouse #2 (see the site plan in FIGURE 5.3). Much of this equipment will operate during the warmer months of the year. Since noise monitoring was not possible in the time period during which this EAW has been prepared, noise predictions have been made based upon equipment information provided by General Mills and manufacturer's sound level data on the equipment provided by the suppliers of this equipment. The predictions assume all equipment operating at the same time and take into

account that some of the proposed living units will be higher than the adjacent roof top equipment. Sound levels have been predicted at the 3rd Floor and top floor levels of the proposed residential buildings on Parcel B and Parcel C, and at the 3rd (top) floor of Warehouse #2. The estimated sound levels from the equipment at these buildings are presented in Table 24.2.

Table 24.2 Projected Noise Levels from the General Mills Research Facility

	3rd Floor	Top Floor
Parcel B	65	70
Parcel C	69	74
Warehouse #2	68	

It can be seen that the 3rd floor levels are similar to that expected at Parcel G that faces the University Steam Plant, but that the top floor levels are somewhat higher due to the close proximity of the buildings to the noise sources. The levels above assume that these parcels are exposed to noise only from the General Mills Facility since they are further from the Steam Plant and shielded by intervening buildings.

The exceptions to the Minnesota rules on noise can also be applied to these parcels. Under the exceptions to the noise rules (listed above) and based upon the theoretical noise predictions, all of the units directly facing the General Mills Facility floors will require an exterior-to-interior noise reduction of 40 dBA. Prior to individual building design, sound level measurements to establish actual sound levels associated with the facility would be appropriate.

Noise Benefits of Removing the ADM Processing Facility

Until operations at the ADM milling facility on the project site were terminated, the noise environment in Father Hennepin Park was dominated by the ADM facility. Based upon previous measurements and estimates of sound associated from only the ADM facility and only from the Steam Plant, it is possible to estimate the noise level reduction in Father Hennepin Park that has resulted from elimination of the ADM facility. Table 24.3 shows estimated noise levels along the center of Father Hennepin Park with distance from 6th Avenue SE.

Table 24.3 Sound Level (dBA) in Father Hennepin Park

Distance west of 6 th Avenue SE	with ADM	without ADM	dBA reduction
0	66.0	63.6	2.3
100	65.6	61.5	4.1
200	65.7	58.7	7.0
300	67.1	57.1	10.0
400	68.9	55.7	13.2
500	71.5	54.4	17.0
600	72.9	53.4	19.5

It can be seen that a small reduction is expected to have occurred even at 6th Avenue SE and a significant reduction of almost 20 dBA occurring 600 feet west of 6th Avenue SE, directly south of the previous major ADM sound source. Therefore, the noise environment of the park has greatly improved with cessation of the ADM operations.

25. NEARBY RESOURCES

Are any of the following resources on or in proximity to the site?

Archaeological, historical or architectural resources?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Prime or unique farmlands or land within an agricultural preserve?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Designated parks, recreation areas or trails?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Scenic views and vistas?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Other unique resources?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If yes, describe the resource and identify any project-related impacts on the resource. Describe any measures to minimize or avoid adverse impacts.

Archaeological, Historical, and Architectural Resources

Archaeology and History of the Project Area

During June of 2003, The 106 Group Ltd., under contract with SchaferRichardson, conducted an assessment of the archaeological potential of the Pillsbury "A" Mill Complex project area. The purpose of this investigation was to assess the Pillsbury Complex project area's potential for containing previously unidentified archaeological resources that may be *potentially* eligible for listing on the National Register of Historic Places (NRHP). The archaeological assessment of the project area included background research at the Minnesota State Historic Preservation Office, a literature search, and a visual reconnaissance of the study area.

Four potential archaeological sites that may contain potentially significant resources related to the commercial and industrial development of the Falls of St. Anthony area within the Pillsbury Complex project area had been identified in a previous study: Northwestern Fence Factory, 1st North Star Ironworks/North Star Flour Mill, Andersch Bros. Warehouse Complex/Pillsbury Warehouse No. 5, and Spooner's Row. In addition to these potential sites, documentary research indicated that Pillsbury Warehouses Nos. 3 and 4, a lime house, a cobbler's shop, and a few small buildings, likely residences, were also formerly situated within the Pillsbury Complex project area.

Of these potential sites, some, such as those related to the lime house or the cobbler's shop, would likely have been destroyed by subsequent warehouse construction. None of the small buildings and/or possible residences are recommended as having potential historical significance. The locations of these potential resources, therefore, are not recommended for archaeological field investigation other than in relation to properties subsequently constructed in the same areas.

Pillsbury Warehouses Nos. 3 and 4 were associated with a significant flour-milling concern. Because, however, the function of the warehouses as storage facilities for materials or products associated with the Pillsbury "A" Mill is known, potential archaeological sites associated with these warehouses are not likely to provide any previously unknown information regarding the warehouses. Further, such sites would not be likely to shed light on technological developments, the industrial development of St. Anthony/Minneapolis, Charles A. Pillsbury, or other important research issues. Because these sites would be unable to answer important research questions, the locations of these potential resources are not recommended for archaeological field investigation.

Any foundation remnants of the Northwestern Fence Factory were probably demolished during the subsequent construction of the Pillsbury machine shop. Further, if this site were to exist, it would

be located in the area of existing Building F and would not, therefore, be impacted during the proposed development project. Based on the level of disturbance in this area, no archaeological work is recommended for the location of this resource.

While a site associated with the 1st North Star Ironworks/North Star Flour Mill has the potential to exist in the Pillsbury Complex project area, if it exists, it is located in the area of existing Buildings A-D and will not, therefore, be impacted during the proposed development project. Because no disturbance to this potential site will occur during the planned development, no archaeological work is recommended for the location of this resource.

The Andersch Bros. Complex/Pillsbury Warehouse No. 5 was originally a commercial complex that, by 1885, contained three vacant stores, Beeman & Johnson (manufacturers of tin lined butter and lard packages), the G. H. Nichols organ factory, and a boarding house. By 1890, the boarding house and vacant stores remained, but the other buildings had been taken over by the North West Hide and Fur Company. Beginning in 1892, the entire complex was used for the warehouse, fur- and wool-processing facility, sales area, and office of the Andersch Brothers for the North West Hide and Fur Company. After 1940, the complex became Pillsbury Warehouse No. 5 (see above), and it remained as such until it was demolished circa 1960.

It is not likely that a high density of artifacts associated with early commercial activity is present in the area of the Andersch Bros. Complex or that equipment or artifacts associated with the earlier industrial concerns remain. The early industrial concerns, the boarding house, and the Andersch brothers hide and fur operations, which occurred long after the period when the fur trade was significant (A.D. 1650-1837), did not make a significant contribution to the broad patterns of history. No information could be located to suggest that Beeman, Johnson, Nichols, were boarders at the house, or the Andersch brothers were historically significant individuals. Based on the inability of potential resources related to the complex, with the exception of Pillsbury Warehouse No. 5, to be associated with a significant historical pattern, trend, event, or individual, it is also not likely that any pre-Pillsbury resources would yield information important in history. Pillsbury Warehouse No. 5 would also be unlikely to answer important research questions for the reasons described for Warehouse Nos. 3 and 4, above. Because, overall, the site of the Andersch Bros. Complex/ Pillsbury Warehouse No. 5 would be unable to answer important research questions from any of the periods of time during which it was occupied, this location is not recommended for archaeological field investigation.

Spooner's Row consisted of adjoining commercial buildings at 419-421 Main Street SE in the area of proposed Buildings 2 and 3 and the proposed West Parking Ramp. One of the buildings was known as the Spooner Building. As early as 1854, a drugstore owned by W. F. Cahill occupied a portion of this building, and the third story of the building was devoted to a social hall. By 1862, a bookstore and a law office had joined Cahill's drugstore in the Spooner Building. This building, along with the other buildings of Spooner's Row, served consumer needs until they were demolished around 1882.

The area historically occupied by Spooner's Row and, potentially, by features associated with it, such as privies or trash pits, has not likely been deeply impacted over time, and this area, therefore, is considered to have high potential for intact post-contact archaeological sites, with the exception of the location of a test pit excavated during the environmental site assessment. Whether resources associated with Spooner's Row remain intact, however, depends on the extent of impact caused by the subsequent construction of Pillsbury Warehouse No. 3 and, perhaps, by the Andersch Bros. Complex, since it is possible that some overlap exists in their locations. Because the demolition of

Spooner's Row occurred approximately 40 years before the construction of Pillsbury Warehouse No. 3, if the construction did not impact the site of Spooner's Row, intact, defined deposits related to the early commercial complex should be present.

The history of the St. Anthony Falls area of Minneapolis is generally focused on how the waterpower of the falls was harnessed to support the numerous milling interests that became the basis for the economic survival, development, and ultimately, strength of Minneapolis. Not as much information is known, therefore, on the area's non-milling activities, especially in the period prior to the completion of the first dam in 1858. Spooner's Row had at least one major building completed in 1854 and possibly several more by 1857. Also, having existed in the Pillsbury Complex project area until circa 1882, this row may be able to shed light on several research issues, including but not limited to 1) the economic growth and survival of St. Anthony prior to the construction of the first dam; 2) commercial activity in St. Anthony prior to the flour-milling boom of the 1870s and 1880s; 3) the early economic networks in which St. Anthony was involved; and 4) the lifeways, especially related to consumer choice and social history of the early Euro-American settlers of St. Anthony and how these may have changed as the town grew. Based on the potential significance of resources associated with Spooner's Row and the possibility that such resources are intact within the Pillsbury Complex project area, it is recommended that an archaeological investigation be conducted of the historical location of Spooner's Row and of potential associated features.

A complete technical report, including project methodology, results and recommendations has been provided to the Minnesota State Historic Preservation Office for review and comment.

Pillsbury A Mill and Historic Designation

Brief History and Description

The Pillsbury "A" Mill was constructed in 1881 to be the flagship mill of C. A. Pillsbury and Company. When Charles Pillsbury conceived of the mill, he wanted it to be larger and more technologically advanced than any other mill in the country yet retain a pleasing aesthetic; therefore, in a move unprecedented by mill owners in Minneapolis, Pillsbury hired an architect, LeRoy S. Buffington, to design the mill building. The equipment plans and subsequent installation were put under the charge of the engineering firm of Gunn & Cross. When the mill was completed, it met all of Pillsbury's expectations. Within a Richardsonian Romanesque exterior was housed an operation capable of producing a record capacity of 4,000 barrels of flour per day (Ferrell 1981). By 1905, that number had increased to 16,113 barrels in a single day, and the mill would eventually reach a capacity of 17,500 barrels per day (Lissandrello 1975). Several additions to the mill were made over time, including a red-tile elevator in 1910; a concrete elevator and annex in 1914 and 1916; the South "A" Mill cleaning house and Pillsbury Warehouse No. 1 in 1917; and a hydroprocessing plant in 1974 (Hess and Kudzia 1991). The Pillsbury "A" Mill was a world leader in flour production from the late nineteenth through the early twentieth century, and though eventually sold to Archer Daniels Midland, it continued to be used for flour production until 2003.

Historical Designation

The Pillsbury "A" Mill has been officially designated for its historic significance in several ways, at city, state and national level. The building was individually listed on the National Register of Historic Places (NRHP) in 1979 for its significant contributions to the milling industry, both in Minnesota and the nation. It was the largest and most advanced mill in the world upon its completion in 1881 and is noted as "a masterpiece of industrial design, a standard from which all other mills of its time were measured" (Lissandrello 1975). Prior to its listing on the NRHP, the

mill was honored for its national significance by being designated as a National Historic Landmark (NHL) in 1966. Properties designated as NHLs not only meet the criteria for a NRHP listing, but also have an increased level of national significance. NHLs must “possess exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archeology, engineering, and culture and... a high degree of integrity of location, design, setting, materials, workmanship, feeling and association” (National Park Service 1995:50). As a property that is eligible for its architectural and engineering significance, the Pillsbury “A” Mill is “a specimen exceptionally valuable for the study of a period, style, or method of construction,” a criterion that is more restrictive than the standards outlined for a NRHP listing (National Park Service 1995:51).

The third form of historical recognition of the Pillsbury “A” Mill is its inclusion as a contributing building within the St. Anthony Falls Historic District, St. Anthony Falls Waterpower Area. The district was first listed on the NRHP in 1971, and named as a state historic district by the Minnesota State Legislature that same year. The district was re-evaluated in 1992 to redefine the district boundaries, further elaborate on the contributing properties within the district, and include the waterpower resources (see FIGURE 9.4). The district is nationally significant under NRHP Criteria A and C in the area of industry, for its role in stimulating Minnesota wheat production during the late nineteenth and early twentieth centuries. The district also has 32 historic archaeological sites that strongly contribute to its overall significance, making the district also significant under NRHP Criterion D.

The St. Anthony Falls Historic District is also locally designated as a historic preservation district by the Minneapolis Heritage Preservation Commission (HPC); therefore, all properties within that district are subject to the review of the HPC.

A summary of the chronology of historic designation is as follows:

- 1966 Designated as a NHL
- 1971 St. Anthony Falls Historic District listed on NRHP
- 1971 St. Anthony Falls Historic District named as a state historic district
- 1979 Pillsbury “A” Mill individually listed on the NRHP
- 1992 St. Anthony Falls Historic District (NRHP) re-evaluated and named St. Anthony Falls Historic District, St. Anthony Falls Waterpower Area.

Historic District Designation

The Pillsbury “A” Mill is individually listed on the NRHP. In addition, it is listed as a contributing resource to a larger historic district.

According to NRHP guidelines, a district “possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development” (National Park Services 1995:5). The variety of property types within a district can range from those that lack individual distinction but contribute to the significance of the district as a whole, to those that serve as focal points, or anchors, and may have considerable significance in their own right. The Pillsbury “A” Mill is of the latter type, serving as a very significant anchor and bound to other anchors by groupings of buildings that may not be individually distinguished but help to establish the feeling, association, and context of the district.

A district may also include contributing and non-contributing properties. Contributing properties are those that were present during the period of significance for the district and that retain historical integrity reflecting its character at that time, or are capable of yielding important

information about the period. Conversely, a non-contributing property was not present during the period of significance or no longer possesses historical integrity (National Park Service 1986). Within a historic district, each contributing property is important in conveying the overall significance of a historic district. The loss of these properties as contributing elements (e.g. the loss of historic integrity) diminishes the historic integrity of the district as a whole. While alterations to, or replacement of, noncontributing properties themselves may not affect the district's integrity in terms of proportions of contributing versus non-contributing properties, the application of inappropriate design features or the construction of in-fill buildings that are not appropriate to the scale, massing, character, and so forth, of a historic district can have an adverse effect on the district's feeling and association.

While minor elements, such as street lights, sidewalks, paving, and other objects that are not substantial in size and scale are usually not specifically addressed in the documentation of a historic district, often the presence of minor, historical features contribute to the overall feeling and design of a district and help to define its historical and visual character. While minor elements such as these were not specifically documented in the revised historic district nomination, this should not be taken as an indication that minor historical elements do not contribute to the district's character. Several sets of tracks serving the Pillsbury "A" Mill are extant. Although not specifically documented in the district nomination or in the individual nomination, these tracks should be considered historic resources, contributing to the understanding of the historic functions within the district and of the mill itself (Personal communication with SHPO 1/9/04). Removal of, alterations to, or preservation of these tracks should be undertaken after consultation with the Minnesota State Historic Preservation Office (SHPO) and the Minneapolis HPC to assure the appropriate treatment of potential historic resources.

References are included in the Appendix to Question 25.

Designated Parks, Recreational Areas, or Trails

The project site is adjacent to the Stone Arch Bridge and Father Hennepin Bluff Park, which includes the historic bridge, and parts of the river gorge, sluiceways, dams, tailraces and newly developed pedestrian paths. The park is currently adjacent to an abandoned industrial facility and rail yard. It attracts vagrants and is avoided by pedestrians except during full daylight in warm weather. The proposed development will put eyes on the park through the length of the park, transforming the current no-man's land into an inviting and user friendly park. The dedication of 5th Avenue, as well as the new pedestrian walk through the site will encourage neighborhood use and allow curious visitors close access to the historic structures on the site.

The Mississippi National River and Recreation Area

The project site falls within the federally-designated Mississippi National River and Recreation Area (MNRRA) (see FIGURE 14.1). This is part of a 72-mile stretch of the Mississippi River and adjacent lands designated as a unit of the National Park System by Congress in 1988.

In 1995, a Comprehensive Management Plan (CMP) for the MNRRA was approved by the Secretary of the Interior. The CMP provides a management framework to assist the state of Minnesota and units of local government in the implementation of integrated resource management programs and to ensure orderly public and private development in the area. The CMP incorporates the state Critical Area program and other state land use management programs by reference as the foundation for compliance with the CMP, and encourages voluntary state and local compliance with additional policies to protect and enhance the river corridor. In 1991, the

Minnesota Legislature designated the federal MNRRA as a state Critical Area by the enactment of Minn. Stat. 116G.15.

The boundary of the Mississippi National River and Recreation Area is shown in FIGURE 14.1 and is identical to the state Critical Area Corridor. “But unlike other National Parks, the Mississippi National River and Recreational Area (MNRRA) has no obvious boundaries or gates. Instead, private and public lands make up the area. The National Park Services works to build partnerships with local park agencies, the private sector, organizations, and citizens to protect the river and its resources, and provide recreational, interpretative, and educational opportunities.” (MNRRA Trail Guide – Minneapolis/Saint Paul Area). FIGURE 14.1 shows a number of existing bicycle and pedestrian routes as well as other recreational facilities along the Mississippi River near downtown Minneapolis.

Scenic Views and Vistas

The project site includes several historic buildings, including the “A” Mill, the Cleaning House, the South Mill, the Red Tile Elevator, Warehouse #1, Warehouse #2 and the two-story Machine Shop. The view to these historic buildings will not be changed in the new development. The historic buildings exist on the perimeter of the site and the new work will occur adjacent to them; visitor access will be increased to the older buildings and the vistas from across the river and from the downtown towers will remain.

26. VISUAL IMPACTS

Will the project create adverse visual impacts during construction or operation? Such as glare from intense lights, lights visible in wilderness areas and large visible plumes from cooling towers or exhaust stacks?

☒ Yes ☐ No

If yes, explain.

The construction will create residential towers from 8 to 27 stories. In concept planning, the buildings are oriented perpendicular to the river to provide both maximum view angles from each of the new tower units but also to maintain view corridors to the river from the neighborhood. The developer has conducted extensive photographic studies of the surrounding neighborhood to discover the current view corridors from public sites in the area. Computer overlays of the photographs have been created to compare the implications on the skyline of the proposed development. Since the public streets are framed by trees, the summer view of the skyline is in large part unchanged; the view corridors down the streets toward the river and the city are unobstructed by the new buildings and the view is unimpeded. In the winter view, after the trees loose their leaves, the buildings will appear; the existing grain silos currently dominate the horizon to a greater degree than the proposed new construction.

The highest building on the site will be 1,109 feet above sea level, which is 108 feet higher than the parapet of the Red Tile Elevator head house. Heights of the proposed new construction, and of some present buildings, are presented in FIGURE 5.4 "Building Heights" and Table 6.1 "Project Summary by Parcel". The height of the existing silos along 2nd Street SE is 950 ft above sea level, and the head house is 998 ft above sea level.

27. COMPATIBILITY WITH PLANS AND LAND USE REGULATIONS

Is the project subject to an adopted local comprehensive plan, land use plan or regulation, or other applicable land use, water, or resource management plan of a local, regional, state or federal agency?

☒ Yes ☐ No.

If yes, describe the plan, discuss its compatibility with the project and explain how any conflicts will be resolved. If no, explain.

Zoning

It is proposed that the project area be rezoned from I1 to C3A. The City may also require that the intervening "Diageo site", which is under partial control of the developers of the proposed project, but not included in the development plan, also be rezoned to C3A. The proposed commercial and residential land uses of the project will be allowed under this zoning classification.

548.230 Purpose. The C3A Community Activity Center District is established to provide for the development of major urban activity and entertainment centers with neighborhood scale retail sales and services. In addition to entertainment and commercial uses, residential uses, institutional and public uses, parking facilities, limited production and processing and public services and utilities are allowed.

Part of the project is within 300 feet of the original Pillsbury A Mill outfall to the river and could be considered to fall within the Shoreland Overlay District. Within this small portion of the proposed project, the height restrictions within this zone may apply. An approximate location of the 300 foot setback based upon an available contour map but not an accurate waterline survey is shown in FIGURE 27.1.

551.440 Purpose. The SH Shoreland Overlay District is established to preserve and enhance the environmental qualities of surface waters and the natural and economic values of shoreland areas within the city, to provide for the efficient and beneficial utilization of those waters and shoreland areas, to comply with the requirements of state law regarding the management of shoreland areas, and to protect the public health, safety and welfare.

551.450. Established boundaries. The boundaries of the SH Overlay District shall be all land located within the following distances from protected waters: (1) One thousand (1,000) feet from the ordinary highwater mark of a lake, pond, wetland or flowage; or (2) Three hundred (300) feet from a river or stream or the landward extent of the floodplain of such river or stream, whichever is greater.



SchaferRichardson, Inc.

David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)
ENVIRONMENTALASSESSMENT
WORKSHEET

Figure 27.1
300' River Edge Setback

551.480 Height of structures. *The maximum height of all structures within the SH Overlay District shall be two and one-half (2.5) stories or thirty-five (35) feet, whichever is less. The height limitation of principal structures may be increased by conditional use permit, as provided in Chapter 525, Administration and Enforcement. In addition to the conditional use standards contained in Chapter 525 and this article, the city planning commission shall consider, but not be limited to, the following factors when determining maximum height:*

- (1) Access to light and air of surrounding properties*
- (2) Shadowing of residential properties or significant public spaces*
- (3) The scale and character of surrounding uses*
- (4) Preservation of views of landmark buildings, significant open spaces or water bodies*

The project site also falls within the Mississippi River Critical Area Overlay District. The same conditions as noted for the Shoreland Overlay District would apply here if applicable.

551.660 Purpose. *The MR Mississippi River Critical Area Overlay District is established to prevent and mitigate damage to the Mississippi River, to preserve and enhance the Mississippi River's natural, aesthetic, cultural and historic value for public use, to protect and preserve the biological and ecological functions of the Mississippi River corridor, to comply with the requirements regarding the management of critical areas, and to protect the public health, safety and welfare.*

551.710 Height of structures. *The maximum height of all structures within three hundred (300) feet of the Mississippi River or the landward extent of the floodplain of the Mississippi River, whichever is greater, and within one hundred (100) feet of the top of a bluff, shall be two and one-half (2.5) stories or thirty-five (35) feet, whichever is less. The height limitations shall not apply to the central riverfront between Plymouth Avenue North and I-35W, or the east bank from First Avenue Northeast to Central Avenue. The height limitations of principal structures may be increased by conditional use permit, as provided in Chapter 525, Administration and Enforcement. In addition to the conditional use standards contained in Chapter 525 and this article, the city planning commission shall consider, but not be limited to, the following factors when determining maximum height:*

- (1) Access to light and air of surrounding properties*
- (2) Shadowing of residential properties or significant public spaces*
- (3) The scale and character of surrounding uses*
- (4) Preservation of views of landmark buildings, significant open spaces or water bodies*

The height exemption could be extended to include this limited portion of the project falls within the 300 foot limit or the applicant may apply for a conditional use permit to increase the maximum permitted height for buildings that may be restricted under this ordinance.

Under Minnesota statutes, any proposed changes to plans and regulations within Minneapolis, that affect lands within the Mississippi River Critical Area Corridor must be submitted to the Minnesota Department of Natural Resources for review, consideration, and approval before becoming effective. Other agencies, including the Metropolitan Council, also have review authority over these changes.

The St. Anthony Falls Historic District

General regulations for the “Left (East) Bank Milling area” within the district are contained in the St. Anthony Falls Historic District Guidelines (June 1980). This area, which includes the Pillsbury A Mill, is bounded by Central Avenue, University Avenue and 6th Avenue SE, excluding the block bounded by University Avenue, 6th Avenue SE, 2nd Street SE, and 5th Avenue SE.

1. **Siting:** *New buildings shall be constructed with principal elevations in line with the facades of existing buildings. New construction shall continue to form a visual wall along the street.*
2. **Height:** *New buildings to be no higher than that of existing silo-mills in the area.*
3. **Rhythm of Projections:** *There shall be no major projections on the principal facades, since there is no consistent pattern of projections of the existing buildings.*
4. **Directional Emphasis:** *The existing buildings have both vertical window bays and horizontal belt courses, resulting in a non-directional emphasis. Therefore, new construction also shall have no strong directional emphasis.*
5. **Materials:** *The exterior surface of new buildings shall be constructed of brick, stone or concrete.*
6. **Nature of Openings:** *Openings should appear in a consistent and repeated pattern across the principal facades. Window openings should be approximately 2-1/2 to 3 times as tall as they are wide. Doors and windows should be set toward the front of the openings but should not be flush with the masonry surface. "Storefront" construction may be used on the first floor.*
7. **Roof Shapes:** *New buildings should have flat or nearly flat roofs.*
8. **Details:** *New buildings should have some emphasis given to the upper termination of the building. Where other surface treatment is used, it should reflect details from other buildings.*
9. **Color:** *The primary surfaces of new buildings should be deep red or buff, similar to the existing unpainted buildings. Trim should be subdued earth tones or flat black.*

The City of Minneapolis Heritage Preservation Commission, at its meeting on November 17, 2003, approved the demolition of the concrete grain elevator and its annex, upon which the proposed development site plan is based (see Appendix to Question 27). The Heritage Preservation Commission (HPC) approved the Certificate of Appropriateness for the demolition of the grain elevator and annex with the condition that the permit not be signed until the HPC has approved plans for the new construction on the elevator and annex site.

Summary

Since the mid 1970's the City has consistently used its investments, subsidies and approvals to de-industrialize the central riverfront. With the cessation of the milling operations at the A Mill, the future of this parcel can now be made consistent with the long term goals and objectives of the City and the pattern of public and private investment in the remainder of the central riverfront.

The proposers will be requesting approval from the City of amendments to its land use regulations to extend the appropriate districts and permissions to allow residential and commercial reuse of this now former industrial site. These amendments and permissions, including those permitting the proposed building heights, will be publicly reviewed, discussed and acted on through the established process of the City. Interested and affected parties will receive notice and will have full

opportunity to participate in this public process of determining whether commercial and residential development of the A Mill site is the appropriate future use and if the character and specific elements of development in this proposal are permitted.

28. IMPACT ON INFRASTRUCTURE AND PUBLIC SERVICES

Will new or expanded utilities, roads, other infrastructure or public services be required to serve the project? ☒ Yes ☐ No.

If yes, describe the new or additional infrastructure or services needed. (Note: any infrastructure that is a connected action with respect to the project must be assessed in the EAW; see *EAW Guidelines* for details.)

There are existing sanitary sewer mains along Main Street SE and 2nd Avenue SE, and interceptor tunnels along 5th Avenue SE and 2nd Avenue SE. The sewer along Main Street SE may need to be extended west to service the Pillsbury A Mill building, and the sewer along 2nd Street SE may need to be extended to the east to service Parcel C. The extent of the expanded sewer will depend upon the final service locations of the various buildings. New sewer would likely be a public main, and would need to be reviewed and approved by the Minneapolis Public Works Department. The existing sanitary sewer system has enough capacity to handle this development provided it is connected properly.

There is an existing watermain around the perimeter of the project, consisting of a 24" watermain along 3rd Avenue SE, 16" watermain along 2nd Street, 12" watermain along 6th Avenue SE, and 8" watermain along Main Street SE. Expansion of the water service is not anticipated.

29. CUMULATIVE IMPACTS

Minnesota Rule part 4410.1700, subpart 7, item B requires that the RGU consider the "cumulative potential effects of related or anticipated future projects" when determining the need for an environmental impact statement. Identify any past, present or reasonably foreseeable future projects that may interact with the project described in this EAW in such a way as to cause cumulative impacts. Describe the nature of the cumulative impacts and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to cumulative impacts (*or discuss each cumulative impact under appropriate item(s) elsewhere on this form*).

N/A

30. OTHER POTENTIAL ENVIRONMENTAL IMPACTS

If the project may cause any adverse environmental impacts not addressed by items 1 to 28, identify and discuss them here, along with any proposed mitigation.

Solar Access

Shadows from buildings may impact the pedestrian environment and immediate neighbors. A shadow impact evaluation of the fully developed project has been performed by Cuningham Group, Architecture for different times of the day and year. For the most part, the shadow impacts affect only the project site between the Vernal and Autumnal Equinox. The taller buildings are near the

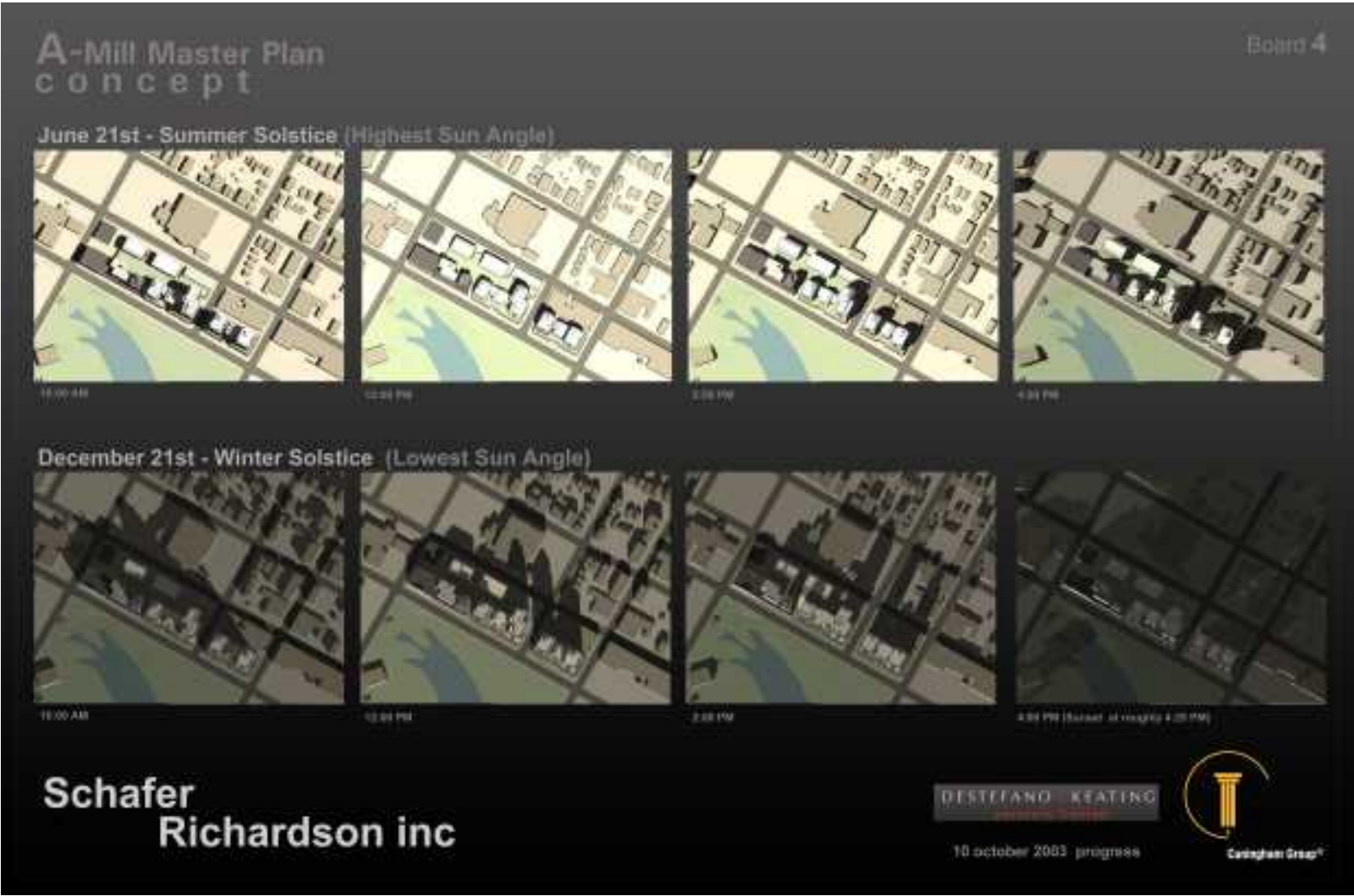
south face of the site and the site predominately contains the sun shadows. The shadows lengthen as the sun angle decreases when the equinox moves toward the solstice; the extended shadows move off the site and impact most directly the adjacent block across 2nd Street shadowing approximately 15% the Pillsbury Research Facility about two hours a day during the Winter Solstice.

Shadows during the Summer and Winter Solstice are shown in FIGURE 30.1. Shadows during the Equinox are shown in FIGURE 30.2.

Pedestrian Level Wind Impacts

All buildings have the potential for creating higher level winds at ground level than might be encountered in open areas. This effect on local wind speeds is caused by the interruption of wind flows by the building at higher elevations and creating drafts and turbulence at ground level that would not otherwise exist. This amplification of wind speed increases with the height of the building. Guidelines for wind speed increases that could have the potential for impacts on pedestrian movement or comfort were developed by the U.S. Department of Housing and Urban Development in 1975. Based upon empirical relationships developed in wind tunnel tests and reported in the published literature, it can be concluded that the potential for significant pedestrian level wind impacts generally begins for buildings that are 30 stories in height. All of the buildings planned for the site are less than 30 stories, with the 27-story north tower of Parcel E being the highest. Therefore, no significant pedestrian level wind impacts are anticipated from the project.

However, some pedestrian level wind impacts can occur near any structure that can interrupt wind flow. Reduction in pedestrian level winds can be accomplished through various design details that can be considered in the final design. These include measures such as protecting building pedestrian entrances with canopies, keeping entrances from exposed corners and flat building faces, and using building setbacks or details near pedestrian entrances that serve to reduce downdrafts from larger building faces, and trees to break up wind currents. Most of these features are included on the proposed site. The landscape plan in FIGURE 5.3 shows extensive tree plantings near building entrances and along walkways. Selected use of conifers on the site, and especially near building entrances and along the extended east-west walkway could provide year-round benefits for reducing pedestrian level winds. The aerial view in FIGURE 6.1 shows the extensive use of pedestals containing townhouses for each of the high-rise buildings, which will mitigate potential pedestrian level wind impacts along adjacent sidewalks.

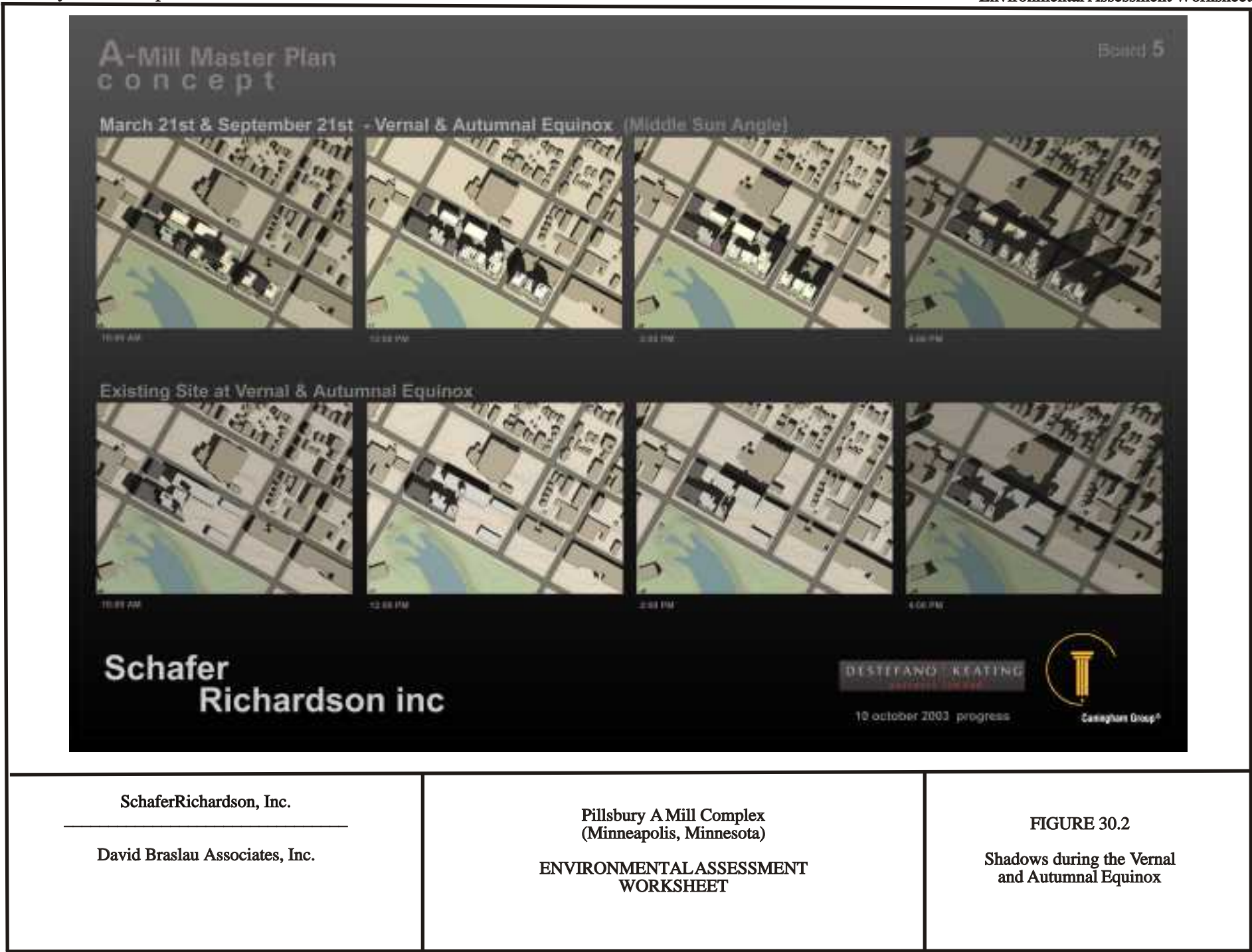


SchaferRichardson, Inc.

David Braslau Associates, Inc.

Pillsbury A Mill Complex
(Minneapolis, Minnesota)
ENVIRONMENTALASSESSMENT
WORKSHEET

FIGURE 30.1
Shadows during the Summer
and Winter Solstice



31. SUMMARY OF ISSUES

Do not complete this section if the EAW is being done for EIS scoping; instead, address relevant issues in the draft Scoping Decision document, which must accompany the EAW. List any impacts and issues identified above that may require further investigation before the project is begun. Discuss any alternatives or mitigative measures that have been or may be considered for these impacts and issues, including those that have been or may be ordered as permit conditions.

11. Fish, Wildlife and Ecologically Sensitive Resources:

Vegetation on the site is limited to isolated small boulevard lawns and associated boulevard trees. Consequently, there are no significant wildlife habitats within the project site. According to the Minnesota Department of Natural Resources Natural Heritage and Nongame Research Program there are a total of seven known occurrences of rare species or animal aggregation sites in the area searched, but only one such occurrence in the project area which they feel may be impacted. There is some concern that any subsurface modifications to Chute's Cave, which supports the largest number of hibernating Eastern Pipistrelles (bats) in the state, a species of Special Concern, could render the site unsuitable for the bat colony through changes in temperature or humidity. Recently performed geotechnical engineering evaluations have concluded that no subsurface work is needed that would intersect the cave or tunnels, and therefore no impacts from such activity are anticipated. The US Fish and Wildlife Service noted that the federally-threatened bald eagle and Higgin's eye pearly mussel are known to occur in Hennepin County, but concludes that "no effects to federally listed or proposed threatened or endangered species are anticipated."

13. Water Use:

One water supply well is known to be present, and is located adjacent to the Red Tile Elevator. The well is reportedly 230 feet deep, is likely finished in the Prairie du Chien Formation, and may be used for on-site irrigation. A second well, used as an environmental monitoring well related to a nearby release, is also present near the northeast corner of the property, and is reportedly finished in the Platteville Formation. Disposition of this well will be evaluated with MPCA during detailed redevelopment construction planning. The proposed redevelopment project will obtain potable water from the City of Minneapolis trunk system. Not taking into credits for existing water use on the site, it is estimated that 309,620 gallons during a peak day could be required for the project at buildout and full occupancy. Discussions with the City of Minneapolis indicate that adequate potable supplies are adequate to meet the needs of the proposed redevelopment without modifications to their existing system.

14. Water-related Land Use Management District

The project is located within the state-designated Mississippi River Critical Area Corridor (Corridor). The proposed project will maintain historically designated resources and replace other industrial uses that did not rely upon access to the Mississippi River. The project is consistent with the long term goals and objectives of the City and the pattern of public and private investment in the remainder of the central riverfront. The project will provide new commercial and residential uses that will be designed and constructed within the parameters established by the City of Minneapolis and zoning requirements that are applicable to development within the Corridor. The project will be designed so as not to adversely impact adjacent streets and the Mississippi River nor impact any existing natural areas and will replace industrial uses. Detailed design features of the project or individual components of the project will be reviewed during the design phase project components. The project will not impact the natural state of the riverbank, bluffs or scenic

overlooks nor any of the adjacent parks or trail systems that have been established or that are planned by the City of Minneapolis. The proposed project will provide new access to the river from areas north of the project through a newly constructed 5th Avenue from 2nd to Main Street and pedestrian access through the project from in the vicinity of 4th Avenue.

16. *Erosion and Sedimentation:*

Five of the existing buildings on this site will remain in place and be renovated, while the others will be demolished and new buildings constructed. The proposed buildings will have underground parking levels that generally extend to near the bedrock surface. The lowest elevation of the below-grade parking levels is approximately 785. During construction, lateral support of the adjacent streets should be considered during the excavation for the below-grade levels. Stormwater treatment will be designed to remove 70% of total suspended solids and meet rate control requirements based on connection capacity. Best management practices to remove sediment prior to discharge may include filtered sump pits, sediments traps, sedimentation basins, or geotextile filters. The appropriation and discharge of water may require additional permits.

17. *Water Quality: Surface Water Runoff:*

The quality of site runoff will be improved after the project is completed. Currently, the site is 95% impervious with no water quality treatment of runoff. Before the project, there is a greater percentage of area used for driveways and parking with the potential for pollution caused by leaking vehicle fluids and deicing materials. After development, the impervious area will be reduced to 85% of the total area. The area of parking lots and driveways is being decreased by approximately 20%. Also, treatment of the runoff will be provided by storage tanks in the parking levels that will be designed to remove 70% of the total suspended solids prior to discharge off site. Stormwater runoff from the site will be piped into the City of Minneapolis stormwater collection system under Main Street, which then is directed into the Phoenix Mill Tunnel, which in turn discharges to the Mississippi River near the project site.

18. *Water Quality: Wastewaters*

Estimated peak sanitary wastewater produced on the site from residential and commercial uses is 309,620 gallons per day, based upon estimated peak water consumption. The development is not expected to produce any wastewater that requires special treatment.

19. *Geological Hazards and Soil Conditions*

No hazards to ground water are anticipated related to the proposed construction. Some karst conditions in the Platteville Formation are known in the vicinity of the site, where a feature known as Chute's Cave is located. The location of the cave is generally under Main Street SE and a small area is under the existing the A Mill, Warehouse #1, and Red Tile Elevator. A relatively large portion of the cave reportedly collapsed in 1881, which also affected the overlying Main Street. Current plans are for townhomes and retail spaces to be constructed within the existing buildings over a portion of the area of the 1881 collapse and a small portion of the cave. Since these foundations have been in place for approximately 100 years, there appears to be little likelihood of further collapse. Accordingly, hazards to groundwater or to the cave itself are not anticipated.

20. *Solid Wastes, Hazardous Wastes, Storage Tanks:*

Demolition waste

Demolition waste will be generated prior to redevelopment, which will consist of concrete, steel bituminous, and various building materials. Asbestos-containing materials were inventoried in April, 2003, and will be removed prior to demolition and disposed of appropriately in a licensed landfill. Lead-based paint and other hazardous building materials (e.g. fluorescent lamps, light

ballasts, mercury switches, appliances, fuel, paint, cleaning supplies, etc.) were also inventoried and will be removed prior to demolition and disposed of according to state and federal rules.

Nonhazardous demolition waste will be disposed of in a demolition landfill.

Post-Construction Waste

Solid waste generation for the completed project will consist almost exclusively of mixed municipal waste generated by residential housing. Volumes of municipal waste are estimated at 12 tons per week. Recycling facilities will be located at appropriate sites throughout the development. Pickup of recycled material is expected to occur on a daily basis. Garbage compactors will also be located throughout the development. Mixed municipal solid waste that is not recycled will either be incinerated at the Hennepin County Energy Recovery Center or hauled to a sanitary landfill by waste haulers licensed by the City of Minneapolis. Source separation of municipal waste is required in the City of Minneapolis, which therefore defines the source separation plan.

Hazardous waste is expected to be generated in very small amounts, if at all, by commercial tenants, space for which is planned to total of 105,000 square feet in three separate locations. It is anticipated that there will be up to 12 emergency electrical generators at the site upon completion of construction. Each generator will have a diesel fuel tank, located in the parking level of each structure. The size of the fuel tanks will range from 500 to 1000 gallons. Such tanks are regulated by MPCA, and require secondary containment and/or periodic leak testing. All tanks are planned to be above-ground tanks, which will facilitate leak detection, should any occur. Emergency response plans will be developed for the generators to plan for appropriate reactions to emergency situations.

21. Traffic:

A traffic analysis for the project has been completed for 2013, one year after anticipated full build-out of the project. Ten critical intersections identified by the City of Minneapolis were analyzed. Results of the analysis are summarized in the table below.

Intersection	2003 Existing	2013 No Build	2013 Post Development
1 st Avenue SE and 4 th Street SE	A	A	A
1 st Avenue SE and University Avenue SE	B	B	C
Hennepin Avenue and 4 th Street	E	F	F
Hennepin Avenue and University Ave. SE	B	B	B
Central Avenue and 4 th Street SE	B	C	D
Central Avenue and University Ave. SE	D	E	F
SB I-35W Ramps and 4 th Street SE	B	B	B
SB I-35W Ramps and University Ave. SE	B	C	C
NB I-35W Ramps and 4 th Street SE	D	E	E
NB I-35W Ramps and University Ave. SE	B	B	B

The intersection of Hennepin Avenue and 4th Street SE currently operates at LOS E. Additional traffic added to the intersection under the 2013 no-build and post-development scenarios would cause the level of service to drop to LOS F. Minor adjustments to the traffic signal timing would allow the Hennepin Avenue and 4th Street SE intersection to operate at LOS E under the 2013 post-development scenario. One potential option, the addition of a dedicated right turn lane on 4th Street SE would permit the intersection to operate at LOS D under the 2013 post-development scenario. Central Avenue and University Avenue SE is expected to operate at LOS E in the 2013

no-build PM peak hour. Although the Pillsbury A Mill Redevelopment only adds about 100 cars (3.5%) to the total intersection volume, the level of service under the 2013 post-development scenario is expected to be at F. Level of service E operations could be achieved under the 2013 post-development scenario by adjusting the traffic signal timing. One potential option that exists to improve the operations of the Central Avenue and University Avenue SE intersection to LOS D operations would be to add a dedicated right turn lane to the eastbound approach. LOS D operations could be achieved at the NE I-35W ramps and 4th Street SE through slight modifications in traffic signal timing.

22. *Vehicle Related Air Emissions:*

Based upon a CO emission and dispersion analysis at the ten intersections analyzed for traffic, it can be concluded that the predicted 1-hour and 8-hour concentrations fall below the established ambient air quality standards for Carbon Monoxide. Therefore, no significant adverse air quality impacts are expected because of the development.

23. *Stationary Source Air Emissions:*

Emergency generators will be installed in each of the buildings equipped with elevators. Up to 12 generators may be required with a range of power requirements. Each generator will require a registration permit from the Minnesota Pollution Control Agency in which emission estimates will be included. Because of limited and periodic use, no significant adverse impacts on air quality are anticipated from this equipment.

24. *Odors, Noise and Dust:*

Demolition

An on-site crusher of concrete from the demolition of the grain elevator and annex will have to be 300 feet from the nearest industrial land use or 1000 feet from the nearest commercial land use, assuming no shielding of the equipment, to comply with daytime state noise standards. If the equipment cannot be effectively placed to take advantage of shielding by structures on the site, a temporary sound barrier will likely be needed to mitigate sound levels. Noise associated with hauling trucks along existing truck routes in the area will increase less than 1 dBA because of the small impact of the additional number of hauling trucks compared with the volume of trucks already on these routes. If the potential for vibration-sensitive activities with the adjacent General Mills Research Center is identified during the demolition process, ground vibration will be monitored and modifications made to the process, time of processing, or location to ensure that vibration limits for these activities will not be exceeded.

Potential noise impacts from adjacent facilities

Noise from the University Steam Plant will impact Parcel F and Parcel G. Under exceptions to the noise rules all of the floors below 180 feet will require an exterior-to-interior noise reduction of at least 30 dBA while floors between 180 and 200 feet will require an exterior-to-interior noise reduction of 40 dBA. Noise from the General Mills Research Facility will impact Parcel B, Parcel C and the remodeled Warehouse. Based upon theoretical noise predictions, all of the units directly facing the General Mills Facility floors will require an exterior-to-interior noise reduction of 40 dBA. Prior to individual building design, sound level measurements to establish actual sound levels associated with the facility would be appropriate.

Potential stack emission impacts from the University Steam Plant

In addition to the noise generated at the Steam Plant stack, for buildings 15 stories and higher that are approved for construction, the potential impacts of stack emissions under certain meteorological conditions should be evaluated. Should the results of a theoretical analysis indicate the potential for impact, it may be necessary to perform wind tunnel studies of individual buildings or groups of buildings as the development proceeds. Measures can be taken in building design to minimize potential impacts such as placement of fresh air intakes to minimize impact from plant emissions. This level of design detail will require a careful analysis or a wind tunnel test of the final design of the buildings in question, if it is determined that this impact could be significant.

25. *Nearby Resources***Archaeological, Historical, and Architectural Resources*****Archaeology and History of the Project Area***

Four potential archaeological sites within the proposed project that may contain potentially significant resources related to the commercial and industrial development of the Falls of St. Anthony area are: Northwestern Fence Factory, 1st North Star Ironworks/North Star Flour Mill, Andersch Bros. Warehouse Complex/Pillsbury Warehouse No. 5, and Spooner's Row. In addition to these potential sites, documentary research indicated that Pillsbury Warehouses Nos. 3 and 4, a lime house, a cobbler's shop, and a few small buildings, likely residences, were also formerly situated within the Pillsbury Complex project area. Of these potential sites, some, such as those related to the lime house or the cobbler's shop, would likely have been destroyed by subsequent warehouse construction. None of the small buildings and/or possible residences is recommended as having potential historical significance. The locations of these potential resources, therefore, are not recommended for archaeological field investigation other than in relation to properties subsequently constructed in the same areas. Based on the potential significance of resources associated with Spooner's Row and the possibility that such resources are intact within the Pillsbury Complex project area, it is recommended that an archaeological investigation be conducted of the historical location of Spooner's Row and of potential associated features.

Pillsbury A Mill and Historic Designation

The Pillsbury "A" Mill was constructed in 1881 to be the flagship mill of C. A. Pillsbury and Company. The Pillsbury "A" Mill has been officially designated for its historic significance in several ways, at city, state and national level. The building was individually listed on the National Register of Historic Places (NRHP) in 1979 for its significant contributions to the milling industry, both in Minnesota and the nation. Prior to its listing on the NRHP, the mill was honored for its national significance by being designated as a National Historic Landmark (NHL) in 1966. The third form of historical recognition of the Pillsbury "A" Mill is its inclusion as a contributing building within the St. Anthony Falls Historic District, St. Anthony Falls Waterpower Area.

Designated Parks and Recreational Areas

The project site is adjacent to the Stone Arch Bridge and Father Hennepin Bluff Park, which includes the historic bridge, and parts of the river gorge, sluiceways, dams, tailraces and newly developed pedestrian paths. The park is currently adjacent to an abandoned industrial facility and rail yard and is avoided by pedestrians except during full daylight in warm weather. The proposed development will put eyes on the park, transforming the current no-man's land into an inviting and user friendly park. The dedication of 5th Avenue, as well as the new pedestrian walk through the site will encourage neighborhood use and allow curious visitors close access to the historic

structures on the site. The project site falls within the federally-designated Mississippi National River and Recreation Area which contains a number of existing bicycle and pedestrian routes as well as other recreational facilities along the Mississippi River near downtown Minneapolis.

Scenic View and Vistas

The view to the “A” Mill, the Cleaning House, the South Mill, the Red Tile Elevator, Warehouse #2 and the two-story Machine Shop will not be changed in the new development. The historic buildings exist on the perimeter of the site and the new work will occur adjacent to them; visitor access will be increased to the older buildings and the vistas from across the river and from the downtown towers will remain.

26. Visual Impacts:

Since the public streets are framed by trees, the summer view of the skyline will be in large part unchanged; the view corridors down the streets toward the river and the city will be unobstructed by the new buildings and the view unimpeded. In the winter view, after the trees lose their leaves, the buildings will appear; the existing grain silos currently dominate the horizon to a greater degree than the proposed new construction. The highest building on the site will be 1,109 feet above sea level, which is 108 feet higher than the parapet of the Red Tile Elevator head house. The height of the existing silos along 2nd Street SE is 950 ft above sea level, and the head house is 998 ft above sea level.

27. Compatibility with Plans and Land Use Regulations

The proposers will be requesting approval from the City of amendments to its land use regulations to extend the appropriate districts and permissions to allow residential and commercial reuse of this now former industrial site. These amendments and permissions, including those permitting the proposed building heights, will be publicly reviewed, discussed and approved through the established process of the City. Interested and affected parties will receive notice and will have full opportunity to participate in this public process of determining whether commercial and residential development of the A Mill is the appropriate future use and if the character and specific elements of development in this proposal are permitted.

28. Impact on Infrastructure and Public Services:

The sewer along Main Street SE may need to be extended west to service the Pillsbury A Mill building, and the sewer along 2nd Street SE may need to be extended to the east to service Parcel C. The extent of the expanded sewer will depend upon the final service locations of the various buildings. New sewer would likely be a public main, and would need to be reviewed and approved by the Minneapolis Public Works Department. The existing sanitary sewer system has enough capacity to handle this development provided it is connected properly. There is existing watermain around the perimeter of the project, consisting of a 24” watermain along 3rd Avenue SE, 16” watermain along 2nd Street SE, 12” watermain along 6th Avenue SE, and 8” watermain along Main Street SE. Expansion of the water service is not anticipated.

30. Other Potential Environmental Impacts

Solar Access

Shadows from buildings may impact the pedestrian environment and immediate neighbors. A shadow impact evaluation of the fully developed project has been performed by Cuninghame Group, Architecture for different times of the day and year. For the most part, the shadow impacts affect only the project site in the time period between the Vernal and Autumnal Equinox.

Pedestrian Level Winds

The potential for significant pedestrian level wind impacts generally begins for buildings that are 30 stories in height. All of the buildings planned for the site are less than 30 stories, with the 27-story north tower of Parcel E being the highest. Therefore, no significant pedestrian level wind impacts are anticipated from the project. However, some pedestrian level wind impacts can occur near any structure that can interrupt wind flow. Reduction in pedestrian level winds can be accomplished through various design details that can be considered in the final design process.

RGU CERTIFICATION. The Environmental Quality Board will only accept **SIGNED** Environmental Assessment Worksheets for public notice in the EQB Monitor.

I hereby certify that:

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9b and 60, respectively.
- Copies of this EAW are being sent to the entire EQB distribution list.

Signature _____ Date _____

Title _____

y:\jobs\2003jobs\203025\ew\24-ew-012104.doc

APPENDIX TO QUESTION 11

**Letters from the Minnesota Department of Natural Resources
Natural Heritage and Nongame Research Program**

And

Letter from U.S. Department of Interior Fish and Wildlife Service



Minnesota Department of Natural Resources

Natural Heritage and Nongame Research Program, Box 25

500 Lafayette Road

St. Paul, Minnesota 55155-4000

Phone: (651) 296-7863 Fax: (651) 296-1811 E-mail: sarah.hoffmann@dnr.state.mn.us

June 24, 2003

Douglas J. Bergstrom
Braun Intertec
3620 Edward St. NE
St. Anthony, MN 55418

Re: Request for Natural Heritage information for vicinity of proposed Pillsbury A. Mill Mixed-Use Development, T29N R24W Section 23, Hennepin County
NHNRP Contact #: ERDB 20031088

Dear Mr. Bergstrom,

The Minnesota Natural Heritage database has been reviewed to determine if any rare plant or animal species or other significant natural features are known to occur within an approximate one-mile radius of the area indicated on the map enclosed with your information request. Based on this review, there are 7 known occurrences of rare species or animal aggregation sites in the area searched (for details, see enclosed database printout and explanation of selected fields). Following are specific comments for **only those elements that may be impacted** by the proposed project. Rare feature occurrences not listed below are not anticipated to be affected by the proposed project.

- The Pillsbury A. Mill is located directly over a cave known as Chute's Cave. This cave and its associated man-made tunnels support the largest number of hibernating Eastern Pipistrelles (*Pipistrellus subflavus*), a Special Concern bat species, in the state. As the cave is the single most important hibernaculum for this species in Minnesota, it is a priority site for protection. If the project involves redevelopment of existing structures only, impacts to the bat colony are probably not a concern. However, if the project will involve ground disturbance below the surface, further evaluation will be needed to determine first and foremost whether the site can actually structurally support new development, and secondly whether the cave and its tunnels would likely be modified during the construction process. Any modifications to the cave system, including non-structural changes, such as changes in temperature or humidity, have the potential to render the site unsuitable for these rare bats. We would obviously like to avoid this outcome. If it is determined that modification of the cave/tunnels is absolutely necessary, please contact Gerda Nordquist at 651-297-7115 to discuss possible means of retaining habitat characteristics necessary to support the bat colony.

The Natural Heritage database is maintained by the Natural Heritage and Nongame Research Program, a unit within the Division of Ecological Services, Department of Natural Resources. It is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, natural communities, and other natural features. Its purpose is to foster better understanding and protection of these features.

Because our information is not based on a comprehensive inventory, there may be rare or otherwise significant natural features in the state that are not represented in the database. A county-by-

DNR Information: 651-296-6157 • 1-888-646-6367 • TTY: 651-296-5484 • 1-800-657-3929

An Equal Opportunity Employer
Who Values Diversity



Printed on Recycled Paper Containing a
Minimum of 10% Post-Consumer Waste

county survey of rare natural features is now underway, and has been completed for Hennepin County. Our information about natural communities is, therefore, quite thorough for that county. However, because survey work for rare plants and animals is less exhaustive, and because there has not been an on-site survey of all areas of the county, ecologically significant features for which we have no records may exist on the project area.

The enclosed results of the database search are provided in two formats: index and full record. To control the release of locational information which might result in the damage or destruction of a rare element, both printout formats are copyrighted.

The index provides rare feature locations only to the nearest section, and may be reprinted, unaltered, in an Environmental Assessment Worksheet, municipal natural resource plan, or report compiled by your company for the project listed above. If you wish to reproduce the index for any other purpose, please contact me to request written permission. Copyright notice for the index should include the following disclaimer:

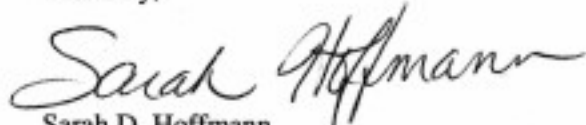
"Copyright (year) State of Minnesota, Department of Natural Resources. This index may be reprinted, unaltered, in Environmental Assessment Worksheets, municipal natural resource plans, and internal reports. For any other use, written permission is required."

The full-record printout includes more detailed locational information, and is for your personal use only. If you wish to reprint the full-record printouts for any purpose, please contact me to request written permission.

Please be aware that review by the Natural Heritage and Nongame Research Program focuses only on *rare natural features*. It does not constitute review or approval by the Department of Natural Resources as a whole. If you require further information on the environmental review process for other wildlife-related issues, you may contact your Regional Environmental Assessment Ecologist, Wayne Barstad, at (651)772-7940.

An invoice for the work completed is enclosed. You are being billed for map and database search and staff scientist review. Please forward this invoice to your Accounts Payable Department. Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources.

Sincerely,



Sarah D. Hoffmann

Endangered Species Environmental Review Coordinator

encl: Database search results
Rare Feature Database Print-Outs: An Explanation of Fields
Invoice

cc: Wayne Barstad
Joan Galli
Gerda Nordquist



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Twin Cities Field Office

4101 East 80th Street

Bloomington, Minnesota 55425-1665

JUL 17 2003

Mr. Douglas J. Bergstrom
Project Director
Braun Intertec
3620 Edward Street NE
St. Anthony, Minnesota 55418

Dear Mr. Bergstrom:

This responds to your June 2, 2003, letter requesting information on threatened or endangered species and rare natural features that may be affected by a proposed residential and commercial redevelopment. The project site is located in the E1/2 of Section 23, T29N, R24W, Hennepin County, Minnesota.

The federally threatened bald eagle (*Haliaeetus leucocephalus*) and federally endangered Higgin's eye pearl mussel (*Lampsilis higginsii*) are known to occur in Hennepin County. Given the location and type of activity proposed, no effects to federally listed or proposed threatened or endangered species are anticipated. This precludes the need for further action on this project as required under section 7 of the Endangered Species Act of 1973, as amended. However, if the project is modified or new information becomes available which indicates that listed species may occur in the affected area, consultation with this office should be reinitiated.

We appreciate the opportunity to provide comments regarding this project. If you have questions regarding our comments, please call Mr. Nick Rowse of my staff at (612) 725-3548, extension 210 or by email at nick_rowse@fws.gov.

Sincerely,

R. Nicholas Rowse

Acting for

Dan P. Stinnett
Field Supervisor

APPENDIX TO QUESTION 14

Memoranda from the Minnesota Department of Natural Resources

Regarding

Structure Height in Mississippi Critical Area

And

Pillsbury A Mill proposal – preliminary general comments

DNR WATERS

Office Memorandum

Date: November 30, 1999

To: Sandy Fecht, MNRRA Hydrologist

From: Steve Johnson
River Management Supervisor
651-296-4802

Subject: Structure Height in Mississippi Critical Area

You had asked that I provide you with specific guidance concerning structure height limits in the Mississippi Critical Area, since it is an issue of concern in more than one community right now and it is important that we treat all communities in the same fashion.

The disadvantage of providing specific guidance is that we could be accused of rulemaking without following the process, but there is also a disadvantage of the opposite approach: if, for example, we tell St. Paul that 65 feet is too tall, the city's logical response is to ask us to define what we will accept. This memorandum is intended to define what we will accept and the criteria on which we base that guidance. If a community proposes standards that are slightly different than what we've defined here, but meet our criteria, I think we have the ability to be that flexible.

Executive Order 79-19 contains two important sections that are not always consistent with each other: the **Standards and Guidelines for Preparing Plans and Regulations**, and the **Interim Development Regulations** that were imposed at the time the Executive Order was signed and which became irrelevant once a local government adopted plans and ordinances. Both sections contain both general and specific information about regulating development, and in many cases they are inconsistent; whenever there is an inconsistency, the Standards and Guidelines prevail, since the Interim Development Regulations are no longer in play.

The **Interim Development Regulations** were intended as a *temporary* stop-gap measure for evaluating development permit proposals *prior to adoption* of approved plans and regulations; in many cases they were not as specific or as restrictive as the framers of Executive Order 79-19 intended the permanent plans and regulations to be, as evidenced by language in the Standards and Guidelines. With respect to structure height, the **Interim Development Regulations** established a limit of *35 feet* in the rural open space, urban developed and urban open space districts, and established *no* height restriction at all in the

urban diversified district. Current issues before us include the Shepard-Davern area of St. Paul, which is in the urban open space district, and the Upper Harbor area in Minneapolis, which is in the urban diversified district.

Section A.3.c of the Interim Development Regulations states:

“The Interim Development Regulations should not be used as a complete model ordinance for adoption by local units of government. At the options of local units of government, they may be used as guidance for the preparation of plans and regulations.”

Clearly, the framers of Executive Order 79-19 did not want local governments to simply adopt the Interim Development Regulations as their Mississippi Critical Area ordinance. The Standards and Guidelines establish some performance standards that could not be met by an ordinance modeled on the Interim Development Regulations, and in some cases (vegetation management, barge facilities, for example) the Standards and Guidelines are specifically inconsistent with the Interim Development Regulations.

There are four specific sections of the Standards and Guidelines I want to point out. The first is the purpose statement in Section A, the second and third the general guidelines in Section B, and the fourth is the specific guidance for structure placement taken from Section C. The three sections are reproduced below. *(Readers may access this text at www.dnr.state.mn.us/waters/).*

“Standards and Guidelines for Preparing Plans and Regulations

“A. Purpose and responsibility

“1. Purposes. The purposes of the critical area designation and the following standards and guidelines are:

“a. To protect and preserve a unique and valuable state and regional resource for the benefit of the health, safety and welfare of the citizens for the state, region and nation;

“b. To prevent and mitigate irreversible damage to this state, region and national resource;

“c. To preserve and enhance its natural, aesthetic, cultural and historical value for the public use;

“d. To protect and preserve the river as an essential element in the national, state and regional transportation, sewer and water and recreational systems; and

“e. To protect and preserve the biological and ecological functions of the corridor.”

“B. General guidelines for preparing plans and regulations

“1. The Mississippi River Corridor shall be managed as a multiple-purpose resource by:

“a. Maintaining the river channel for transportation and providing and maintaining barging and fleeting areas in appropriate locations consistent with the character of the river and riverfront.

“b. Conserving the scenic, environmental, recreational, mineral, economic, cultural, and historic resources and functions of the river corridor.

“c. Providing for the continuation and the development of a variety of urban uses, including industrial and commercial uses, and residential, where appropriate, within the river corridor.

“d. Utilizing certain reaches of the river as a source of water supply and as a receiving stream for properly treated sewage and industrial waste effluents.”

“2. In order to manage the river corridor consistent with its natural characteristics and its existing development, the following guidelines are established for each corridor district:

“a. Rural open space district. The lands and waters within this district shall be used and developed to preserve their open, scenic and natural characteristics and ecological and economic functions. Presently undeveloped islands shall be maintained in their existing natural state. The transportation function of the river shall be maintained and preserved.

“b. Urban diversified district. The lands and waters within this district shall be used and developed to maintain the present diversity of commercial, industrial, residential, and public uses of the lands, including the existing transportation use of the river; to protect historic sites and areas, natural scenic and environmental resources; and to expand public access to and enjoyment of the river. New commercial, industrial, residential, and other uses may be permitted if they are compatible with these goals.

“c. Urban developed district. The lands and waters within this district shall be maintained largely as residential areas. The expansion of existing and development of new industrial, commercial and other non-residential or non-recreational uses shall be limited to preserve and enhance the residential character of this district.

“d. Urban open space district. The lands and waters within this district shall be managed to conserve and protect the existing and potential recreational, scenic, natural, and historic resources and uses within this district for the use and enjoyment of the surrounding region. Open space shall be provided in the open river valley lands for public use and the protection of unique natural and scenic resources. The existing transportation role of the river in this district shall be protected.”

“C. Specific standards and guidelines for preparing plans and regulations

...
“2. Each local government and state agency shall prepare plans and regulations to protect and preserve the aesthetic qualities of the river corridor, which provide for the following considerations:

“a. Site plans. Site plans shall be required to meet the following guidelines:

“(4) Site plans shall include standards to ensure that structure, road, screening, landscaping, construction placement, maintenance, and storm water runoff are compatible with the character and use of the river corridor in that district.

“(5) Site plans shall provide opportunities for open space establishment and for public viewing of the river corridor whenever applicable, and shall contain specific conditions with regard to buffering, landscaping and revegetation.

“b. Structures. Structure site and location shall be regulated to ensure that riverbanks, bluffs and scenic overlooks remain in their natural state, and to minimize interference with views of and from the river, except for specific uses requiring river access.”

It is important to recognize that the Mississippi River plays a unique role in the American landscape. It is the largest and most diverse floodplain river ecosystem in the northern hemisphere and the third largest in the world. Executive Order 79-19 recognizes the unique character of this river and establishes that it shall not be treated like a typical urban river in the United States or Europe. It is special, and must be treated as such.

In addition to the specific language of Executive Order 79-19, I also met on Sept. 1, 1999 with three of the primary authors of the executive order to discuss their memory of what they intended when they drafted the order in the mid-1970s. A summary of that meeting is attached.

Based on the executive order language, it would not be rational to think the framers of Executive Order 79-19 anticipated waiving structure height limitations even in the urban diversified district, considering that district runs from Interstate 694 in Fridley to Franklin Avenue in Minneapolis, and from Otto and Ohio streets in St. Paul to South St. Paul and Newport. The urban diversified district was created to cover large areas of mixed use development that didn't fall easily into one of the other districts. While structure height standards need to retain some flexibility in this mixed use district, the height limitations should not be entirely waived.

In looking at the values we're directed to protect, I can envision waiving structure height limits in the immediate downtown areas of Minneapolis and St. Paul, since none of those values exist any longer and additional tall structures would blend instantly with the existing landscape. That is not true, however, for the rest of the Critical Area corridor, including the

areas immediately across the river from the two downtowns.

Those statements immediately cry out for a clear definition of the downtowns and for that I turned to the Metropolitan Council. In Minneapolis, the Metropolitan Council (in 1999) defines the downtown area as lying along the river's right descending bank from Plymouth Avenue to Interstate 35W. The city (Minneapolis' downtown plan, "Downtown 2010," date unknown) defines downtown as lying along the river's right descending bank from Third Avenue North to Interstate 35W. It seems appropriate to accept the Metropolitan Council's somewhat larger definition. In St. Paul, the Metropolitan Council (in 1999) defines downtown as lying along the river's left descending bank from Wabasha Street to Broadway Street (extended). Oddly, that leaves the area on the river side of Kellogg Boulevard from West Seventh Street to Wabasha Street outside the defined downtown; it might be more appropriate to define the upstream limit of downtown as Eagle Street (extended), thereby including the Rivercenter parking ramp, the new Science Museum of Minnesota, Ramsey County offices (formerly West Publishing) and the Ramsey County Jail within the defined downtown.

In the rural open space and urban developed districts, the management goals make it clear that a structure height limit of 35 feet is most appropriate (see the Standards and Guidelines, Section B.2.a and B.2.c, which are reproduced on page 3 of this memorandum).

In the urban diversified and urban open space districts, I offer the following guidance (based on the sections of Executive Order 79-19 cited above and comments from the executive order's authors):

1. Structures should be lowest when closest to the river, with taller structures possible further back from the river if measures are taken to provide some level of screening, or buffering.
2. A structure height limit of 35 feet seems appropriate in both the urban diversified and urban open space districts (outside the two downtowns).
3. For structures set back more than 100 feet but less than 300 feet from the ordinary high water mark, I could see allowing a structure of up to 45 feet through a conditional use permit process that would ensure the opportunity to require planting of screening vegetation, and would ensure other values are protected or enhanced, as discussed below.
4. For structures set back more than 300 feet from the ordinary high water mark, I could see allowing a structure of up to 50 feet through a conditional use permit process that would ensure the opportunity to require planting of screening vegetation, and would ensure other values are protected or enhanced, as discussed below.

Our urban foresters tell us it is possible to screen, or buffer, a 50-foot tall building with trees (over a period of time), but it is not possible to screen a taller building (as was proposed in the Shepard-Davern area of St. Paul). That is why I selected that 50-foot figure, although I think we need to remain open to a flexible approach to those standards if a community can demonstrate a unique physical condition. (Note also that the Uniform Building Code adopted by most communities defines structure height in a way that allows significant portions of the roof to exceed the height standard; a 50-foot standard means that some portion of the structure may reach 65-75 feet.)

The conditional use permit evaluation process identified above should give special consideration to:

- A. Existing industrial uses sometimes need to build additional tall structures regardless of their location (the oil refinery in Newport is a good example).
- B. The potential visual impact of a proposed structure on significant cultural resources must be assessed. This includes the St. Anthony Falls Historic District and Historic Fort Snelling.
- C. The potential visual impact of a proposed structure as viewed from the river is particularly important in the scenic gorge areas between the two downtowns. My office will conduct a computer-based visual impact assessment whenever it is considered appropriate. Such an evaluation of the Shepard-Davern area is currently underway.
- D. Other factors should be taken into account in evaluating a conditional use permit application, including additional buffering, impacts on views in the corridor, maintenance of vegetation and increased bluff setbacks.

Structures taller than those in the guidance above could be considered as part of a Planned Unit Development (PUD) project if the development included significantly more publicly owned lands along the river than might otherwise be required under the Mississippi Critical Area Program, significantly more shoreline restored to a natural condition than might otherwise be required, and significant publicly owned corridors through the development to provide for neighborhood access—both visual and physical—to the river.

Any flexibility provided to a development beyond the basic standards should only occur in exchange for significant gains for the public—beyond minimum requirements—in terms of public ownership, natural shoreline, and public access to view and reach the river. A community must never use its flexibility tool as an economic incentive, nor should development economics drive any decision.

This guidance seems consistent with our mission, as outlined in Executive Order 79-19, while remaining aware of the flexibility needs of a large urban area. The communities need to be reminded, too, that the Mississippi Critical Area amounts to a very small portion of the land mass of the Twin Cities; the communities have lots of land where there are no state-imposed limits on structure height. They are really giving up very little to protect a globally important resource that is the very reason their communities exist.

Feel free to distribute this to communities and citizens in the corridor as appropriate.

height.wpd
height.doc

DEPARTMENT: Natural Resources - DNR Waters

Office Memorandum

DATE: June 25, 2003 (amended by SF 01/07/04)

FROM: Sandy Fecht
Mississippi River Critical Area/MNRRRA Hydrologist

CONNECTIONS: Phone 651-297-2401; fax 651-296-0445; e-mail: sandy.fecht@dnr.state.mn.us

SUBJECT: Pillsbury A Mill proposal - preliminary general comments
Mississippi River Critical Area Corridor/MNRRRA

Thank you for the invitation to the TAC meeting, but I am out of town this week. I'd like to take this opportunity to inform any staff and interested parties about the Critical Area program's authority and roles and include some preliminary comments for preparation of the EAW to be passed on to the developer/author.

General Background

Under authority of the Critical Areas Act of 1973, the Mississippi River and its adjacent Corridor was designated a State Critical Area in 1976, reaffirmed through Executive Order 79-19 in 1979, and made permanent by action of the Metropolitan Council later in 1979.

The purposes of designating the Mississippi River as a Critical Area include:

- a) protecting and preserving a unique and valuable state and regional resource for the benefit of the health, safety and welfare of the citizens for the state, region, and nation;
- b) preventing and mitigating irreversible damage to this resource;
- c) preserving and enhancing its natural, aesthetic, cultural, and historical value for public use;
- d) protecting and preserving the river as an essential element in the national, state and regional transportation, sewer and water and recreational systems; and
- e) protecting and preserving the biological and ecological functions of the corridor.

In November 1988, Congress passed Public Law 100-696 [16 U.S.C. § 460zz et seq.] establishing the Mississippi National River and Recreation Area as a unit of the National Park Service (NPS). In 1991, the Legislature designated the Mississippi National River and Recreation Area (MNRRRA) as a state critical area in accordance with Chapter 116G. The Mississippi National River and Recreation Area boundary is the same as the State-designated Critical Area boundary. The MNRRRA Comprehensive Management Plan (CMP) incorporates by reference the requirements of the Minnesota Critical Areas Act, as well as additional voluntary policies for land use and resource protection and enhancement within the river corridor.

Currently the Department of Natural Resources, Metropolitan Council, and National Park Service work in partnership in various roles on the Mississippi Critical Area and MNRRRA Programs to protect and preserve the Corridor. Management of the Mississippi River Corridor Critical Area was transferred from the Environmental Quality Board to the Department of Natural Resources in 1995.

All portions of the proposed Pillsbury A Mill project as described to me are within the state-designated Mississippi River Critical Area Corridor and the federal Mississippi National River and Recreation Area, and within the classified Urban Diversified District.

Plan and Ordinance Amendments that affect the Critical Area

Under MN Statutes and Rules and Executive Order 79-19, any proposed amendments or modifications to plans and regulations of a local unit of government, including ordinance rezonings, that affect lands within the Mississippi River Critical Area Corridor must be submitted to DNR for review, consideration, and approval before becoming effective. Local units of government may amend plans and regulations affecting lands within the Corridor by resubmitting the plans and regulations with any recommended changes to me for consideration and coordination of the approval process.

When DNR receives any proposed, final draft recommended changes from the local unit of government, we then send a copy to Metropolitan Council, who is charged with reviewing the proposed amendments for consistency with Executive Order 79-19, regional objectives, and the Metropolitan Development Guide. Within 45 days of receipt of formal initiation of review of the amendments [up to a maximum 75 days with extension], the Metropolitan Council shall submit its written evaluation and recommendation to DNR.

Within 45 days of receiving the evaluation and recommendation from Metropolitan Council, the DNR shall review and determine whether the amendments are consistent with the provisions of the statutes, rules, and Executive Order 79-19. When DNR has completed the review, it shall either approve the amendments by written decision and notify the local unit of government, or return them to the local unit of government for modification with a written explanation of the need for modification. Any amendments returned for modification shall be revised consistent with the direction of DNR and resubmitted to DNR within 60 days. A local unit of government can enact only the plans, regulations, and amendments that affect the Critical Area that have the written approval of DNR. Amendments are not effective unless approved by DNR.

It is my understanding that the developer is proposing a zoning change which affects lands within the Corridor. In addition to any ordinance or zoning change, any proposed activity that differs from that allowed or included in the current approved Plan (1989) or other plans for lands within the Critical Area Corridor must also be submitted to DNR as a proposed amendment and approved prior to being effective.

Development activities

Local units of government, regional and state agencies shall permit development in the Corridor only in accordance with the approved, enacted plans and regulations that affect lands within the Corridor. As required by MN Rules and Executive Order 79-19, local units of government, state and regional agencies shall notify the DNR of any development activity requiring either a public hearing or discretionary action by the local unit of government at least 30 days before taking action. The DNR shall also be notified of the final action taken on the application. For Minneapolis, I have been the designated contact for these notifications since 1997 by mail or fax, in addition to the notification to the Area Hydrologist, currently Julie Ekman (Region 3 Office, 1200 Warner Road, St. Paul, 55106, 651-772-7919; fax 651-772-7977). Ms. Ekman and Area Hydrologist Molly Shodeen (same office, 651-772-7915) are also DNR leads for assistance with the Shoreland Management Program, Floodplain Management Program, Protected Waters Permits, and Water Appropriations Permits in the City of Minneapolis. In response to notifications from the City, they and I share the responsibilities of reviewing, and providing comments as appropriate, to the City for the Critical Area and other DNR programs.

It is a myth that EQB (until 1995) or DNR (1995 on) was ever given approval or denial authority over Critical Area Corridor development projects in communities that have approved Critical Area plans and regulations. As noted, we only have approval authority over plans, regulations, and amendments that affect lands within the Corridor. Just like other citizens under other laws for mandamus, DNR does have the legal authority to institute appropriate judicial proceedings to compel proper enforcement of the plans and regulations that affect the Critical Area if we determine that the administration of the local plans and regulations is inadequate to protect the state or regional interest. Other DNR approvals relate to the permits and programs mentioned above.

If there are new zoning or other staff in any local unit of government who have not heard our presentations about the DNR and National Park Service programs and required notifications or visited the web site, we

welcome the opportunity to provide them with an orientation of Critical Area, MNRRA, Floodplain, Shoreland, Public Waters, and Appropriations responsibilities.

Relationship to state and federal laws

Under the Executive Order, the Corridor shall be managed in accordance with applicable federal and state laws, including state laws pertaining to variances, environmental review, wetlands, public waters permits, shoreland management, and floodplain management, and federal laws and permits from the U.S. Corps of Engineers.

Variances

Any proposals for variances must comply with all statutory prerequisites. According to the courts, the applicant has a heavy burden of proof to show that all of the variance prerequisites have been met. City designates, acting as a Board of Appeals and Adjustments, have the following statutory powers with respect to variances from MN Statutes, section 462.357, subd. 6:

- 1) Variances shall only be granted when it is demonstrated that such actions will be in keeping with the spirit and intent of the ordinance.
- 2) Strict enforcement would cause undue hardship because of circumstances unique to the individual property.
- 3) Undue hardship means the property in question cannot be put to a reasonable use if used under conditions allowed by the official controls.
- 4) Undue hardship means the plight of the landowner is due to circumstances unique to the property not created by the landowner.
- 5) Undue hardship means the variance, if granted, will not alter the essential character of the locality.
- 6) Economic considerations alone shall not constitute an undue hardship if a reasonable use of the property exists under the terms of the ordinance.
- 7) No variance shall be granted that would permit any use that is prohibited in this ordinance.
- 8) Undue hardship also includes, but is not limited to, inadequate access to direct sunlight for solar energy systems.

Environmental Review

DNR also reviews and usually submits comments on an EAW, EIS, or AUAR within the Corridor. The author of any needed environmental document for this project should include the following information prior to publication in the EQB Monitor:

EAW Question # 8: See above for permits and approvals.

EAW Question # 14: Discuss project compatibility with land use district regulations:

The project's compliance with each of the applicable Executive Order 79-19 Standards and Guidelines (http://files.dnr.state.mn.us/waters/watermgmt_section/critical_area/execord.pdf) that must be followed by the applicable, above-mentioned governmental entities and the analysis of compliance should be discussed by the EAW author. Some authors choose to list the actual applicable standard verbatim before

discussing the compatibility of the project with each of the standards. But the key is the discussion on the compatibility of each applicable standard, not just a listing and a wholesale conclusion of compatibility.

Based on the information provided so far, the applicable Executive Order 79-19 Standards and Guidelines needed to be compatible with appear to include:

- Purposes of designation [Ex. Or. A. 1.]
- Guidelines for Urban Diversified District - New commercial, industrial, residential, and other uses may be permitted if they are compatible with the goals to maintain the present diversity of uses; protect historical sites and areas, natural, scenic, and environmental resources; and to expand public access to and enjoyment of the river.
- Protect bluffs greater than 18% and provide conditions for the development of bluffs between 12% and 18% slopes.[Ex. Or. C. 1. a. (4)]
- Minimize runoff [Ex. Or. C. 1. a. (5)]
- Improve the quality of runoff. [Ex. Or. C. 1. a. (5)]
- Minimize site alteration. [Ex. Or. C. 1. a. (6)]
- Erosion control. [Ex. Or. C. 1. a. (6)]
- Site plans required for all development for which a permit is required, except single-family residential structures. [Ex. Or. C. 2. a.]
 - New development and expansion permitted only after the approval of site plans which adequately assess and minimize adverse effects and maximize beneficial effects.
 - Site plans shall include activities undertaken to ensure consistency with the objectives of the Executive Order and shall include measures which address adverse environmental effects.
 - Site plans shall include standards to ensure that structures, roads, screening, landscaping, construction placement, maintenance, and storm water runoff are compatible with characteristics and use of corridor in that district.
 - Site plans shall provide opportunities for open space establishment and for public viewing of the river corridor whenever applicable.
 - Site plans shall contain specific conditions with regard to buffering, landscaping, and revegetation.
- Standards for structure site and location to ensure riverbanks, bluffs, and scenic overlooks remain in their natural state. [Ex. Or. C. 2. b.] - *including structure setback compliance from ordinary high water level and bluffline*
- Standards for structure site and location to minimize interference with views of and from the river, except for specific uses requiring river access [Ex. Or. C. 2. b.] *See attached DNR policy on height issues within the Corridor.*
- Maximization of the creation and maintenance of open space and recreational potential of the Corridor in accordance with the Critical Area standards. [Ex. Or. C. 6]
- Public dedication of appropriate riverfront access land or other Corridor lands for all developments of residential, commercial, and industrial subdivisions, and planned developments [Ex. Or. C. 6 f.]
- Standards for new or modified transportation facilities [Ex. Or. 7. a. - c.]
- Standards for new or modified utilities [Ex. Or. 7. a. - b.]
- All capital improvement programs or public facilities programs shall be consistent with the standards and guidelines in Ex. Ord. Section B. and C. [Ex. Or. C. 8.]

EAW Question #25 - Nearby resources, designated parks:

This question should address the project's compliance or impacts as they relate to the voluntary MNRRA policies that are more restrictive than Critical Area.

EAW Question #27 - compatibility with plans and land use regulations:

Local governments within the state Critical Area Corridor are required to incorporate the Standards and Guidelines of Executive Order 79-19 into local plans and ordinances for the Corridor. Local units of government shall permit development in the Corridor only in accordance with those adopted, approved plans and regulations. The response should discuss and determine the compatibility of your project to all plans and ordinances of the City of Minneapolis and revise any incompatibilities. Any proposed ordinance or plan amendments must acknowledge DNR approval prior to being effective.

Thank you for your attention to these preliminary comments and procedures, and protecting and preserving the Corridor through implementation of the standards. We'll be looking for the comment period for the environmental review document and any future plan or ordinance amendments. Please keep us apprised.

APPENDIX TO QUESTION 25

References for Architectural History of Pillsbury “A” Mill Complex

Ferrell, R. L.

1981 Pillsbury’s “A” Mill, Part One” *Hennepin County History* 40(1):3-11.

Hess, J.A. and C. Kudzia

1991 St. Anthony Falls Historic District, St. Anthony falls Water Power National Register of Historic Places Nomination Form. On file at the Minnesota State Historic Preservation Office, St. Paul.

Lissandrello, S.

1975 Pillsbury “A” Mill. National Register of Historic Places Inventory-Nomination Form. On file at the Minnesota State Historic Preservation Office, St. Paul.

National Park Service

1986 *National Register Bulletin 14: Guidelines for Counting Contributing and Noncontributing Resources for National Register Documentation.* U.S. Government Printing Office, Washington, D.C.

1995 *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation.* U.S. Government Printing Office, Washington, D.C.

APPENDIX TO QUESTION 27

City of Minneapolis Heritage Preservation Commission

Staff report on proposed demolition of concrete grain elevator and its annex

And

Letter approving demolition with conditions

**CITY OF MINNEAPOLIS
HERITAGE PRESERVATION COMMISSION STAFF REPORT**

FILE NAME: Pillsbury A Mill Grain Elevators (400 2nd St. SE, 100 3rd Ave. SE, 413 Main St. SE, 425 Main St. SE, 501 Main St. SE, 199 Main St. SE, 419 Main St. SE, 300 2nd St. SE, 113 6th Ave. SE)

DATE OF APPLICATION: October 21, 2003

APPLICANT: David Frank for Shafer Richardson

DATE OF HEARING: November 18, 2003

HPC SITE/DISTRICT: St. Anthony Falls Historic District

CATEGORY: contributing

CLASSIFICATION: Certificate of Appropriateness

STAFF INVESTIGATION AND REPORT: Amy Lucas

DATE: October 29, 2003

A. SITE DESCRIPTION AND BACKGROUND:

The National Register of Historic Places nomination forms for this property are attached. The period of significance for the St. Anthony Falls Historic District is 1858-1940. The National Register nomination describes the Pillsbury A Mill building as a contributing building with “major additions.” The tile elevator (reddish silos) is an addition constructed in 1910 and the concrete elevator and annex (white silos) is an addition constructed in 1914 and 1916. The concrete elevator section completed in 1914 contains 45 reinforced concrete bins and the 1916 annex contains 24 bins. The engineers, Barnett and Record, designed both concrete elevator sections and they are attached to the tile elevator by a conveyor belt.

B. PROPOSED CHANGES:

The applicant is proposing to demolish the concrete grain elevator and its annex.

Letters of support for the demolition from Marcy-Holmes Neighborhood Association and Nicollet Island-East Bank Neighborhood Association are included in the application.

C. GUIDELINE CITATIONS:

Chapter 599. Heritage Preservation Regulations

599.480. (b) *Destruction of historic resource.* Before approving the demolition of a property determined to be an historic resource, the commission shall make findings that the demolition is necessary to correct an unsafe or dangerous condition on the property, or that there are no reasonable alternatives to the demolition. In determining whether reasonable alternatives exist, the commission shall consider, but not be limited to, the significance of the property, the integrity of the property and the economic value or usefulness of the existing structure, including its current use, costs of renovation and feasible alternative uses. The commission may delay a final decision for a reasonable period of time to allow parties interested in preserving the historic resource a reasonable opportunity to act to protect it.

The Secretary of the Interior’s Standards for Rehabilitation recommend:

District/Neighborhood

- Identifying, retaining, and preserving buildings, and streetscape, and landscape features which are important in defining the overall historic character of the district or neighborhood. Such features can include streets, alleys, paving, walkways, street lights, signs, benches, parks and gardens, and trees.
- Retaining the historic relationship between buildings, and streetscape and landscape features such as a town square comprised of row houses and stores surrounding a communal park or open space.
- Protecting and maintaining the historic masonry, wood, and architectural metals which comprise building and streetscape features, through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and reapplication of protective coating systems; and protecting and maintaining landscape features, including plant material.
- Protecting buildings, paving, iron fencing, etc. against arson and vandalism before rehabilitation work begins by erecting protective fencing and installing alarm systems that are keyed into local protection agencies.
- Evaluating the overall condition of building, streetscape and landscape materials to determine whether more than protection and maintenance are required, that is, if repairs to features will be necessary.
- Repairing features of the building, streetscape, or landscape by reinforcing the historic materials. Repair will also generally include the replacement in kind - or with a compatible substitute material - of those extensively deteriorated or missing parts of features when there are surviving prototypes such as porch balustrades, paving materials, or streetlight standards.
- Replacing in kind an entire feature of the building, streetscape, or landscape that is too deteriorated to repair - when the overall form and detailing are still evident - using the physical evidence to guide the new work. This could include a storefront, a walkway, or a garden. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.
- Designing and constructing a new feature of the building streetscape, or landscape when the historic feature is completely missing, such as row house steps, a porch, streetlight, or terrace. It may be a restoration based on historical, pictorial, and physical documentation; or be a new design that is compatible with the historic character of the district or neighborhood.
- Designing required new parking so that it is as unobtrusive as possible, i.e., on side streets or at the rear of buildings. "Shared" parking should also be planned so that several businesses can utilize one parking area as opposed to introducing random, multiple lots.
- Designing and constructing new additions to historic buildings when required by the new use. New work should be compatible with the historic character of the district or neighborhood in terms of size, scale, design, material, color, and texture.
- Removing nonsignificant buildings, additions, or streetscape and landscape features which detract from the historic character of the district or the neighborhood.

St. Anthony Falls Historic District Design Guidelines recommend:

H. Left (East) Bank Milling:

This area is bounded by Central Avenue, University Avenue and Sixth Avenue Southeast, excluding the block bounded by University Avenue, Sixth Avenue Southeast, Second Street Southeast, and Fifth Avenue Southeast.

1. Siting: New buildings shall be constructed with principal elevations in line with the facades of existing buildings. New construction shall continue to form a visual wall along the street.
2. Height: New buildings to be no higher than that of existing silo-mills in the area.
3. Rhythm of Projections: There shall be no major projections on the principal facades, since there is no consistent pattern of projections of the existing buildings.
4. Directional Emphasis: The existing buildings have both vertical window bays and horizontal belt courses, resulting in a non-directional emphasis. Therefore, new construction also shall have no strong directional emphasis.
5. Materials: The exterior surface of new buildings shall be constructed of brick, stone or concrete.
6. Nature of Openings: Openings should appear in a consistent and repeated pattern across the principal facades. Window openings should be approximately 2-1/2 to 3 times as tall as they are wide. Doors and windows should be set toward the front of the openings but should not be flush with the masonry surface. "Storefront" construction may be used on the first floor.
7. Roof Shapes: New buildings should have flat or nearly flat roofs.
8. Details: New buildings should have some emphasis given to the upper termination of the building. Where other surface treatment is used, it should reflect details from other buildings.
9. Color: The primary surfaces of new buildings should be deep red or buff, similar to the existing unpainted buildings. Trim should be subdued earth tones or flat black.

D. FINDINGS:

1. The building is a contributing structure to the St. Anthony Falls Historic District. The concrete elevators are an addition to the contributing Pillsbury A Mill and were constructed during the period of significance of the historic district.
2. *The Secretary of the Interior's Standards for Rehabilitation* recommend retention of features "important in defining the overall historic character of the district or neighborhood." The St. Anthony Falls Historic District is significant for grain and lumber milling. Grain elevators are a significant feature of the historic district and retain the historic integrity.
3. The demolition is not necessary to an unsafe or dangerous condition on the property.
4. The concrete elevators are vacant and reuse is not proposed. The applicant has provided the difficulties of grain elevator reuse as part of the application. Reuse feasibility of grain elevators has proven to be cost prohibitive.

5. The cost of demolition of the elevators is \$1 million and the applicant has provided cost estimates of the new construction which will contribute greatly to the City's revenue. The current taxes of the entire 2 ½ block development site are \$145,000.
6. The Heritage Preservation Commission has not approved development plans for this site and the applicant has provided preliminary site plans as part of this application.

E. STAFF RECOMMENDATION:

Staff recommends that the HPC adopt staff findings and approve the Certificate of Appropriateness for the demolition with the following condition:

1. The demolition permit will not be signed until the City has approved the new construction for this site.

HERITAGE PRESERVATION COMMISSION
350 South Fifth Street - Room 210
Minneapolis MN 55415-1365

Office (612) 673-2422
TDY (612) 673-2157



20 November 2003

David Frank
615 1st Ave. NE, Suite 500
Minneapolis, MN 55413

RE: 400 2nd St. SE, 100 3rd Ave. SE, 413 Main St. SE, 425 Main St. SE, 501 Main St. SE, 199 Main St. SE, 419 Main St. SE, 300 2nd St. SE, 113 6th Ave. SE

Dear Mr. Frank:

At the public hearing of November 18, 2003 the Minneapolis Heritage Preservation Commission voted to approve the demolition of the above location with the following conditions:

1. The demolition permit will not be signed until the City has approved the new construction for the site.
2. HABS/HAER level photographs must be taken and copies must be submitted to the HPC before demolition occurs on the site.

Please be aware that you will not receive the permit until the above conditions have been resolved with HPC staff. Please feel free to call me with any concerns at (612) 673-2422.

Sincerely,

Amy Lucas
Preservation Planner

cc: Inspections
Kit Richardson